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# VARIATION IN PAST COUNTERFACTUAL CONSTRUCTIONS

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A Thesis

Presented to

The Graduate Faculty

Central Washington University

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In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

English (TESOL)

---

by

Victoria Lauren Zencak

May 2018

CENTRAL WASHINGTON UNIVERSITY

Graduate Studies

We hereby approve the thesis of

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Candidate for the degree of Master of Arts

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Dean of Graduate Studies

## ABSTRACT

### VARIATION IN PAST COUNTERFACTUAL CONSTRUCTIONS

by

Victoria Lauren Zencak

May 2018

The two past counterfactual constructions under investigation in this study are the past counterfactual conditional (Type 3) and the past counterfactual *wish* complement clause (PCWCC). Each of these has both a standard and variant form. The verb in the standard forms is *had* + past participle; the verb in the variant forms is *would have* + past participle. Although reference books and textbooks acknowledge variant forms, generally describing them as informal or conversational, they have not received serious scrutiny. It was the goal of this study to see whether variant forms are currently common in usage and to understand more fully the contexts in which they appear. The study included a survey administered to college students between the ages of 18 and 25 and a search of data from the Corpus of Contemporary American English. Findings will be of use to researchers, teachers, and students interested in current usage patterns of English.

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I dedicate this thesis to my parents, whose high educational ideals made me who I am today and whose “spare food” kept me fed; to my roommate Mike, whose experience in experimental psychology was invaluable to my methodology and sanity (and I wish him luck on his own thesis); and to Tyler, who is my greatest emotional support and might have finished a thesis of his own if he had not started dating me.

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## CHAPTER I

### INTRODUCTION

“If Archimedes would have known functions . . .” (Knill, 2014).

“What they wish they would have known” (Adams & Williams, 2014).

The quoted material above comes from titles of a conference presentation (first) and a peer-reviewed journal article (second). What may strike the reader is the authors’ use of verb forms in conditional constructions. Both examples may be evidence of the growing presence of an alternate linguistic structure: the use of conditional *would have* + past participle in contexts where *had* + past participle would traditionally be expected. As demonstrated by the introductory examples, there are at least two grammatical structures in which the variant *would have* + past participle structure appears. The first, and more widely acknowledged, construction is the protasis (*if* clause) of the past counterfactual (Type 3) conditional: A prescriptively written version of the first example would be *If Archimedes had known functions*. The other construction consists of the verb *wish* and its past counterfactual complement clause: A prescriptively written version of the second example would be *What they wish they had known*. However, as the original examples illustrate, these grammatical variations are starting to appear unironically in academic works.

The use of *would have* + past participle in the protasis of the Type 3 conditional in American English (e.g., *If she would have heard the phone ring, she would have answered*) has been discussed in grammar and usage reference books since at least the 1920s, when *The Century Collegiate Handbook*, by Griever and Jones (1924), labeled the

variant form as a student error (cited in *Webster's dictionary of English usage*, 1989). Nonetheless, the variant construction has not been studied thoroughly. Most recently, Ishihara (2003) conducted an exploratory study of the construction's use and acceptability among Midwestern U.S. speakers, but the production sample consisted of only nine participants, and the judgment section contained largely Midwestern U.S. speakers, limiting the study's generalizability. However, though the study was exploratory, its results showed that nearly half of the produced utterances contained *would have* in place of *had*, and most of the 100 non-ESOL-trained judges found no error in *would have* in the Type 3 protasis (though only one-third of the 20 ESOL-trained judges, either graduate students or teachers, accepted the forms).

The variant Type 3 conditional is described in grammar and usage reference books as an informal feature of American English (Garner, 2016; Quirk, Greenbaum, Leech, & Svartvik, 1985) or an informal spoken feature (*Webster's Dictionary of English Usage*, 1989). English for Speakers of Other Languages (ESOL) textbooks present the variant construction as regional (Broukal, 2010), informal spoken (Azar & Hagen, 2017; Fuchs & Bonner, 2012), or incorrect (Swan, 2016; Maurer, 2012). In her academic research on the topic, Raysor Hancock (1993) declared the construction to be a growing phenomenon in informal speech. Declerck and Reed (2006), however, believed the variant form to be more widespread and observable in writing as well, and Ishihara (2003) found it to be widely accepted and produced by participants whose native language is English, opening the topic to further discussion.

The use of *would have* + past participle in the semantically and pragmatically related past counterfactual *wish* complement clause (PCWCC), though present in American English (e.g., *I wish that you would have said something*) and even found in titles of peer-reviewed academic articles and presentations, has not been covered in grammar reference books and appears in few ESOL textbooks. It is nearly absent from academic literature, with the exception of Raysor Hancock (1993) and Ishihara (2003), who also conducted the study of Type 3 conditionals discussed in the previous two paragraphs. Ishihara found that the variant construction appeared in over half of the utterances produced by nine participants. In her judgment section with 120 participants, most of the 100 non-ESOL-trained participants did not perceive *would have* as an error, nor did nearly half of the 20 ESOL-trained participants (teachers or graduate students). Due to the sample size and demographics of the study, these production and judgment findings should be regarded as preliminary. Any other mention of the PCWCC in research related to this topic merely compares its prescriptive form and use to those of the standard Type 3 conditional.

The aim of this study is to provide more information on the variant forms of the Type 3 conditional and the PCWCC. This chapter introduces the traditional prescriptive forms and variants of both constructions in English, as well as the way these constructions are presented in ESOL texts. A more detailed account of both constructions can be found in Chapter II.

## Traditional Forms

The traditional (or prescriptive) Type 3 construction consists of a protasis (an adverbial dependent clause that generally commences with *if*, often called an *if*-clause or a conditional clause) and an apodosis (the main clause of a conditional construction, also called a matrix clause). Prescriptively, the verb form in the past counterfactual protasis consists of the past perfect form, *had* + past participle (e.g., *if we had seen your message*). The verb form in the corresponding apodosis is *would have* + the past participle (e.g., *we would have called you back*). Additionally, many studies claim that the protasis is “fronted” (starts the sentence) in the majority of conditional constructions, both spoken and written (e.g., Comrie, 1986; Ford & Thompson, 1986, Haiman, 1978, 1986; McCabe, 1983), though among these authors only McCabe (1983) and Ford and Thompson (1986) give data to support this claim. Thus, fully assembled, an example of a prototypical past counterfactual construction would be *If we had seen your message, we would have called you back*.

Like the Type 3 conditional construction, the PCWCC also prescriptively requires the verb in its complement clause to be in the past perfect form (e.g., *I wish (that) I had seen your message*). Not only has the resemblance in form been noticed, but the resemblance in use has been noted as well. The expression of regret is considered a pragmatic application of both constructions, both in ESOL texts (Blass, Iannuzzi, Savage, & Reppen, 2012; Fuchs & Bonner, 2012; Maurer, 2012) and in linguistic research (Ferguson, 1991; Kulakova & Nieuwland, 2016). In fact, Larsen-Freeman and Celce-Murcia (2016) claimed that the PCWCC draws its form from the Type 3 construction. In

theory, the constructions *If [I had known about my boss's birthday]* and *I wish [I had known about my boss's birthday]* have parallel predicates. As such, any grammatical changes or variations that manifest in one form may affect the other.

### **Variation in the Type 3 Construction**

Although there are prescriptively acceptable variations of the Type 3 construction (e.g., *Had I known . . .*), the use of *would have* in the protasis is under investigation here. An example of this construction is *if I would have known about my boss's birthday*. This construction has been associated with American English in grammar and usage references (Quirk et al., 1985; *Webster's Dictionary of English Usage*, 1989) for almost a century, first appearing in Griever and Jones's 1924 usage manual as an error that writers should avoid (cited in *Webster's Dictionary of English Usage*, 1989). This construction is one of the two foci of this research.

### **Variation in the PCWCC Construction**

A prescriptively accepted variation in the PCWCC construction is the deletion of the *that* complementizer (e.g., *I wish [that] I would have known*), which occurs more frequently in informal registers but is not considered nonstandard (Larsen-Freeman & Celce-Murcia, 2016). However, the second focus of this research is the variant *would have* + past participle construction, whose use is prescriptively questionable.

### **Type 3 and PCWCC Variation in ESOL Materials**

Until now, the use of *would have* + past participle in the protasis of the Type 3 construction has been acknowledged in brief comments in ESOL textbooks, serving both to inform ESOL students and warn them against adopting the form (e.g., Azar & Hagen,

2017; Broukal, 2010; Fuchs & Bonner, 2012; Maurer, 2012). In Larsen-Freeman and Celce-Murcia's (2016) grammar book for ESOL teachers, this variant is described in a footnote as increasingly common in spoken American English. Surprisingly, though, little research has been conducted to quantify the usage frequency of the form and verify that its discussion in ESOL literature is sufficient. Furthermore, most ESOL discussions of the variant *would have* + past participle make no mention of the form's recorded appearance in clauses embedded in *wish* clauses. The purpose of this study is to fill these gaps in the literature and assess the potential need for modifications to ESOL materials.

The following questions have guided this research project: (1) How prevalent is the use of *would have* + past participle in the protasis of the Type 3 construction in written academic English and spoken English? (2) Does the order of protasis and apodosis influence the participants' choice of auxiliary verb (*had* versus *would have*)? (3) Does the use of pronoun or noun subjects affect the frequency of the variant Type 3 construction? (4) Do different dialect/language backgrounds of 18- to 25-year-old participants completing a survey affect their production and acceptance of the form *would have* + past participle in the Type 3 construction? (5) Does the prevalence of *would have* + past participle in the protasis of the Type 3 construction in written academic English and spoken English change over time? (6) How prevalent is the use of *would have* + past participle in the PCWCC construction in written academic English and spoken English? (7) Does the presence of the *that* complementizer in the PCWCC construction influence the participants' choice of *would have* or *had* as the auxiliary form? (8) Does the use of pronoun or noun subjects affect the frequency of the variant PCWCC construction? (9)



Do different dialect/language backgrounds of 18- to 25-year-old participants completing a survey affect their production and acceptance of the form *would have* + past participle in the PCWCC construction? (10) Does the prevalence of *would have* + past participle in the PCWCC construction in written academic English and spoken English change over time?

These questions will be explored through an analysis of data found in the Corpus of Contemporary American English (COCA) and data collected from a survey that asks participants to (1) provide responses to fill-in-the-blank prompts (a cloze exercise) for auxiliary verbs in the constructions under investigation and (2) mark their grammatical assessment of a variety of sample sentences provided.

Chapter II discusses the Type 3 conditional, the PCWCC, and their variants in more detail. It also covers the use of surveys and corpora to study these constructions. Chapter III outlines the methodology of the study. Chapter IV presents the results and discusses their significance. Chapter V contains the conclusion and provides areas for future research.

## CHAPTER II

### LITERATURE REVIEW

This chapter addresses a variety of topics related to the Type 3 and PCWCC constructions. First, the chapter presents the definition of a conditional and its canonical forms. Next is a discussion of conditional constructions that express counterfactuality, including present and past counterfactuals and mixed conditionals, followed by a review of syntactic (present and historical) and semantic features of the canonical Type 3 construction. Because this study focuses on variation, this chapter includes a summary of previous research on variant English Type 3 constructions. It also includes a review and analysis of ESOL materials addressing the Type 3 construction.

The chapter then turns to a discussion of the PCWCC in English, which includes its prescriptive form, the meaning and use of the construction, previous research on the variant PCWCC construction, and the presentation of the PCWCC in ESOL materials. The chapter concludes with a brief discussion of the use of corpora and surveys in linguistic studies, including in the present study.

#### ***Defining Conditional***

Several researchers have noted that the study of conditionals is rendered more challenging through varying uses of terminology: Quirk et al. (1985), Frazier (2003), and Wierzbicka (2007) noted that the terminology in the field is inconsistent, with Wierzbicka describing the process of defining a conditional as “circular” (p. 17) and Frazier suggesting that the terminology needs revision.

The term *conditional* most often refers to a specific construction that establishes a state of affairs that must exist or actions or events that must occur before other states, actions, or events are possible. It is generally a two-clause construction in which the dependent clause is adverbial and commences with *if* (e.g., *If you don't finish your dinner, you won't get ice cream*). A sentence with the two essential clauses can, of course, be expanded to include other clauses (e.g., *If you don't finish your dinner and if you don't take out the garbage, you won't get ice cream, and you won't get your allowance*). Though *if* is the most common conditional subordinator, discussions of the conditional include other adverbial subordinators:

*as far as*: Jespersen, 1954

*as if*: Jespersen, 1954; Quirk et al., 1985

*as long as*: Biber, Johansen, Leech, Conrad, and Finegan, 1999; Huddleston and Pullum, 2002; Jespersen, 1954; Quirk et al., 1985

*as though*: Jespersen, 1954; Quirk et al., 1985

*assuming (that)*: Huddleston and Pullum, 2002; Quirk et al., 1985

*before*: Quirk et al., 1985

*even if*: Huddleston and Pullum, 2002

*except that*: Jespersen, 1954; Quirk et al., 1985

*given (that)*: Jespersen, 1954; Quirk et al., 1985

*granted*: Jespersen, 1954

*granting*: Jespersen, 1954

*if only*: Huddleston and Pullum, 2002

*in case*: Biber et al., 1999; Huddleston and Pullum, 2002; Jespersen, 1954; Quirk et al., 1985

*in the event (that)*: Biber et al., 1999; Huddleston and Pullum, 2002; Quirk et al., 1985

*just so (that)*: Quirk et al., 1985

*lest*: Biber et al., 1999; Jespersen, 1954

*once*: Biber et al., 1999; Quirk et al., 1985

*on condition (that)*: Biber et al., 1999; Huddleston and Pullum, 2002; Jespersen, 1954; Quirk et al., 1985

*only if*: Huddleston & Pullum, 2002

*provided (that)*: Biber et al., 1999; Huddleston and Pullum, 2002; Jespersen, 1954; Quirk et al., 1985

*providing (that)*: Jespersen, 1954; Quirk et al., 1985

*so*: Jespersen, 1954

*so far as*: Jespersen, 1954

*so long as*: Huddleston and Pullum, 2002; Jespersen, 1954; Quirk et al., 1985

*suppose*: Jespersen, 1954; Quirk et al., 1985

*supposing (that)*: Huddleston and Pullum, 2002; Jespersen, 1954; Quirk et al., 1985

*unless*: Biber et al., 1999; Dancygier, 2002, 2003; Garner, 2016; Huddleston and Pullum, 2002; Jespersen, 1954; Larsen-Freeman and Celce-Murcia, 2017; Maclin, 1981; Maule, 1988; Quirk et al., 1985

*when*: Akatsuka, 1986; Haiman, 1986; Quirk et al., 1985

*whenever*: Biber et al., 1999; Quirk et al., 1985

*where*: Quirk et al., 1985

*wherever*: Biber et al., 1999; Quirk et al., 1985

*whether*: Biber et al., 1999; Huddleston and Pullum, 2002

*without (that)*: Jespersen, 1954

However, the general consensus is that *if* is the prototypical conditional subordinator (Biber et al., 1999; Comrie, 1986; Huddleston & Pullum, 2002; Quirk et al., 1985, inter alia). Therefore, *if* is the subordinator that this study uses in examining the Type 3 conditional form. But it is first necessary to address other definitions of *conditional* present in the literature.

Conditionals with alternate structures or logic have also been introduced. The paratactic conditional (e.g., *Do that again and you're fired*) features no explicit conditional subordinator (Elder & Jaszczolt, 2016; Haiman, 1986, inter alia) but is still considered semantically conditional (Haiman, 1986). Dancygier (2003) cited the “comparative conditional” (e.g., *the more, the merrier*) as an example of the broad spectrum of conditionals. On the other side of the spectrum, the rhetorical conditional (e.g., *If you're hungry, there's pizza in the fridge*) has the prototypical conditional marker *if*, but the apodosis (main clause) is not semantically contingent on the truth of the protasis (adverbial *if*-clause). These alternate structures are beyond the scope of this study.

The term *conditional* can also refer to the modal verb *would* + verb, which is sometimes described as the “conditional tense” and other times the “conditional mood” (Torres Ramirez, 2005, p. 197). Even the terminology employed to describe a specific conditional construction varies widely throughout the literature, as will be demonstrated through the variety of terms presented as descriptors of the Type 3 construction.

### **Apodosis and Protasis with *If***

As mentioned previously, the conventional form of a conditional construction consists of an apodosis and a protasis. However, there are other terms used to refer to these clauses. In their pedagogical text, Larsen-Freeman and Celce-Murcia (2016) chose to use the terms “main clause” and “*if* clause” for *apodosis* and *protasis*, respectively (p. 576). Quirk et al. (1985) referred to the “matrix clause” and the “conditional clause” (p. 1010), and Bailey (1989) referred to clauses of “contingency” and “hypothesis” (p. 275). Dancygier (2003) raised an important question: Are conditionals defined by form or function? The most representative answer to this question appears to be *both form and function*.

Many research articles introduce the form of a conditional along with its function of *expressing condition in some way*. The condition expressed in the protasis is explained in various fashions. According to Garner (2016), the conditional expresses a condition, which “may be open (real or factual) or hypothetical (closed or unreal)” (p. 166). He explained that while open conditionals do not specify the fulfillment (or lack of it) of the condition, hypothetical conditionals indicate that the condition “has not been, is not, or is unlikely to be fulfilled” (p. 166). Similarly, Quirk et al. (1985) referred to “open (neutral)

and hypothetical” conditions and stated that *real*, *factual*, and *neutral* are equivalent terms for *open*, while *closed*, *unreal*, *rejected*, *nonfactual*, *counterfactual*, and *marked* are equivalent terms for *hypothetical* (p. 1010). Based on their definition, open conditionals do not indicate whether the action was, is, or will be fulfilled, while hypothetical ones imply that the speaker does not believe in the fulfillment of the action. Meanwhile, Comrie (1986) believed that hypotheticality is a continuum and that attempts to separate real and unreal conditionals are “contorted and often empty formulations” (p. 88). Nonetheless, many discussions of conditionals divide their meanings into three categories. Polanska (2006) introduced the original Latin classification of conditionals: real or *realis*, potential or *potentialis*, and unreal or *irrealis*, which she referred to as “a distinction between always true, potentially true, and never true” (p. 9). These divisions are similar to Larsen-Freeman and Celce-Murcia’s (2016) divisions into factual, future, and imaginative conditionals. Many researchers and teachers explain the differences among conditionals by referring to Types.

### **Type Conditionals**

Numerous research projects on conditionals conducted for the sake of ESOL inquiry refer to the Type conditionals. These are sometimes known as “pattern” conditionals (e.g., Declerck & Reed, 2006) or the “zero,” “first,” “second,” and “third” conditionals (e.g., Wu, 2012). As Larsen-Freeman and Celce-Murcia (2016) stated, some “ESOL textbooks and reference grammars . . . introduce and practice only three types of conditional sentences ([though] the labels used to describe these structures vary)” (p.

575). Al Rdaat and Gardner (2017) noted that there are three or four types of canonical conditionals, depending on which scholars one consults.

These are examples of the “Type” (0), 1, 2, and 3 conditionals:

Type 0: *If you make noise, people notice you.*

Type 1: *If you make noise, people will notice you.*

Type 2: *If you made noise, people would notice you.*

Type 3: *If you had made noise, people would have noticed you.*

Type 0 is an open (or factual) conditional. In this Type, the protasis refers to a real condition. Type 0 conditionals, when presented to ESOL students, contain the simple present tense in both clauses: *If the sun is up, it is daytime.* Type 0 conditionals describe general facts about the world. In practice, this type of conditional appears in other tenses and aspects as well: *If the moon was shining, it was nighttime* or *If it has rained, the ground has been dampened* (Polanska, 2006). These forms, however, are not explicitly mentioned in most discussions of the Type 0 conditional. Scholars and teachers who do not discuss the Type 0 conditional seem to consider it either close enough to Type 1 not to warrant separate discussion or unlike a true conditional because there is no question of factuality in the events of the protasis.

The Type 1 conditional contains pending conditions in the protasis, and the apodosis describes actions that may occur in the future. The protasis contains the simple present tense, and the apodosis contains the *will* future: *If you break that vase, you will get into trouble.* In this sentence, whether the person will break the vase is yet to be determined. The Type 1 conditional is sometimes called the future conditional. Although



*be going to* could also be used in the apodosis, it is generally not mentioned in discussions of Type 1 conditionals.

The Type 2 and Type 3 conditionals are considered nonfactual or remote because each "entertains the condition as being satisfied in a world which is potentially different from the actual world" (Huddleston & Pullum, 2002, p. 748). "Imaginative" is the label given to these conditionals by Larsen-Freeman and Celce-Murcia (2016). In these two constructions, the protasis refers to an unreal condition. The Type 2 conditional form contains the simple past in the protasis and the modal *would* in front of the main verb in the apodosis: *If you broke that vase, you would get into trouble*. It is often taught as the hypothetical conditional because both the protasis and the apodosis refer to a hypothetical event or state.

The Type 3 conditional, which is the conditional form that this research focuses on, depicts scenarios that are contrary to fact (counterfactual). The protasis of a Type 3 conditional contains the past perfect form of a verb, and the apodosis uses the modal *would* paired with the auxiliary *have* to indicate remoteness in time: *If you had broken that vase, you would have gotten into trouble*.

The influence of this typification is broad. Even from outside the ESOL field, Comrie (1986) believed that the "Type" conditionals must be the most common conditionals because they were the forms that ESOL texts chose to present. In addition, researchers working with conditionals in the field of medicine (Carter-Thomas & Rowley-Jolivet, 2008, 2014) and neuroscience (Kulakova, Aichhorn, Schurz, Kronbichler, & Perner, 2013; Kulakova & Nieuwland, 2016) have adopted the

terminology. To limit the number of variables under investigation, this study focused on Type 3 conditionals.

### **Mixed Conditionals**

Mixed conditionals, which are a blending of both Type 2 and Type 3 conditionals, provide a challenge for researchers looking at conditionals (Declerck & Reed, 2006). In some mixed conditionals, the past perfect in the protasis (Type 3) indicates anteriority to a present counterfactual result in the apodosis (Type 2) as in *If she had received medical treatment in time, she would still be alive today*. The reverse combination (Type 2 in the protasis; Type 3 in the apodosis) can also occur in sentences like “If they were here longer, I could have introduced you to them” (Larsen-Freeman & Celce-Murcia, 2016, p. 590).

Declerck and Reed (2006) showed that the clauses in Types 2 and 3 can have various time references. Table 1 is a summary of their analysis. As Table 1 shows, the 3 + 3 combination (past perfect + conditional perfect) can be used for any time reference.

Mixed conditionals are not the focus of the corpus-based stage of this study; however, it is important to acknowledge their existence because participants produced them in the survey stage of the study.

Table 1

*Possible Verb Form Combinations in Counterfactual Conditionals*

Protasis (P) time	Apodosis (A) time	tense patterns in P + A
past	past	3 + 3 or 2 + 3
past	present	3 + 2 or 3 + 3
past	future	3 + 3
present	past	2 + 3 or 3 + 3
present	present	2 + 2 or 3 + 3 or 2 + 3
present	future	2 + 2 or 3 + 3 or 2 + 3
future <sup>1</sup>	past	3 + 3
future	present	3 + 2 or 3 + 3
future	future	3 + 3

**Other *If*-Conditionals**

One issue with the Type conditional presentation is that it may limit students to three possible sentence structures when the actual range of possibilities is far wider. ESOL material creators' preoccupation with the three Type conditionals seems to be rote rather than data-driven, given that factual conditionals (Type 0) are more frequent, especially in the present tense (Fulcher, 1991; Larsen-Freeman & Celce-Murcia, 2017; Maule, 1988). Huddleston and Pullum (2002) considered factual conditionals to be "the default conditional construction" (p. 739). Maule (1988) found that the Type 0 construction (e.g., *If it rains, it pours*) was twice as common in British TV programs as the Type 1 construction. He also noted that the use of factual past conditionals and present continuous conditionals was not even acknowledged in ESOL materials.

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<sup>1</sup>The authors claim that this form exists, but their example shows a past + future construction, not a future + past construction.

Maule's motivation for denouncing the Type system stemmed from a previous personal case of a native French-speaking ESOL student who had strongly rejected the sentence "If he comes, I go" as unacceptable despite the fact that the equivalent structure is acceptable in French and she was living with an English-speaking host family. The author surmised that the student had been overexposed to the three traditional "Type" conditionals that restrict present conditionals to the Type 1 construction. He proposed replacing the Type system with past and non-past divisions and real (factual) and unreal (hypothetical and counterfactual) categories.

Building on Maule's work, Fulcher (1991) investigated a series of forms using *if*. He looked at academic texts, narratives, magazines, and news stories to identify *if* structures (113,363 total words; 299 examples of *if*). His investigation identified over 20 structures, presented in Figure 1.

In his study, the traditional 3 types constitute 23.41% of the total *if* constructions, indicating the need for inclusion of the many other conditional constructions. However, Fulcher (1991) did not discuss the Type 3 variation under investigation (i.e., *If I would have known, I would have done something*). Though there are many more conditional forms worthy of investigation and discussion, this study will focus on the Type 3 conditional, both the standard form and the variant form.

1. *If + PrS → Will* (Type 1, e.g., *If you eat that, you will get sick*)
2. *If + PstS → Would* (Type 2, e.g., *If you ate that, you would get sick*)
3. *If + PstPerf → Would have* (Type 3, e.g., *If you had eaten that, you would have gotten sick*)
4. *As if* (e.g., *He looked as if he had seen a ghost*)
5. Used in an interjection (e.g., *if possible*)
6. *If + PrS → PrS/PrProg* (e.g., *If it's cold outside, it's foggy/it's snowing*)
7. *If + PrS → imper* (e.g., *If you need money, call me*)
8. *If + PrS → PrM* (e.g., *If you need money, you can call me*)
9. *If + PrS → going to* (e.g., *If I see a ghost, I'm going to scream*)
10. *If + going to → PrS* (e.g., *If it's going to rain, I bring an umbrella*)
11. *If + PrPerf → PrS* (e.g., *If I have read a book once, I don't read it again*)
12. *If + PrPerf → Will\** (e.g., *If you have lost my book, I will be very upset*)
13. *If + PrPerf → PrM\** (e.g., *If you have lost my book, I can buy a new one*)
14. *If + PrPerf → PrPerf\** (e.g., *If I've said it once, I've said it a thousand times*)
15. *If + PstS → PstS* (e.g., *If he arrived early, he waited in the hallway*)
16. *If + PstS → PrS* (e.g., *If she was twenty in 1980, she is fifty-eight now*)
17. *If + PstS → Will\** (e.g., *If anyone sent me an email, I will see it on Monday*)
18. *If + M → M* (e.g., *If we could help her, we would do so*)
19. *If + PstM → PrS* (e.g., *If they could see us, they remember nothing*)
20. *If + Will → Will<sup>2</sup>* (e.g., *If you will bring the turkey, I will bring the stuffing*)
21. *If + Will → M\** (e.g., *If someone will see this note, they can respond to it*)

Figure 1. Structures appearing with *If*. Adapted from “Conditionals revisited,” by G. Fulcher, 1991, *ELT Journal*, 45, p. 165.

Note. Pr = Present; Pst = Past; S = Simple; Perf = Perfect; Prog = Progressive; M = Modal; imper = imperative

### Counterfactuality in Conditionals

As Jacobsson (1975) observed, in the minds of some linguists, the term *counterfactual* refers only to the Type 3 conditional (e.g., *If they had seen the movie, they would have enjoyed it*), while others include present counterfactual (Type 2) statements

<sup>2</sup> This structure was marked as odd by the author; it appeared in only one 19th century example.

\*These structures featured only one or two occurrences in the author's investigation

such as “If I were king . . .” (p. 225). However, Quirk et al. (1985) included both potential counterfactual structures in their analysis: (1) the “hypothetical past” in the conditional clause and a past modal in the matrix clause (i.e., Type 2); (2) the “hypothetical past perfective” in the conditional clause and a past perfective modal in the matrix clause (i.e., Type 3) (p. 1010). Schachter (1971) referred to Type 3 constructions (e.g., *If I had known . . .*) as the *past conditional* and Type 2 constructions (e.g., *If I were you . . .*) as the *present conditional*, noting that Type 2 can be hypothetical or counterfactual based on context. Declerck and Reed (2006) also stated that “patterns” 2 and 3 can both be counterfactual. In discussions of counterfactuality, truth conditions also come into play.

### **Truth Conditions**

In the field of semantics, truth conditions are used to analyze whether a statement is true (has taken place, is taking place, or will take place in the real world) or false (has not taken place, is not taking place, or will not take place in the real world). In conditional sentences, each clause is evaluated separately as *p* (the logical term for the protasis) and *q* (the logical term for the apodosis), and then the truth-value of the sentence is assessed as a whole.

Although studying truth conditions can be aggravating to teachers and researchers from fields other than semantics and logic, Ippolito (2013) observed that language should be taught in context and that teaching conditionals contextually requires teaching or discussing at least some degree of logic. It is thus important that teachers have a nuanced

understanding of the contextual truth conditions (i.e., possible interpretations) of the conditionals that they teach, even if they have never heard of a truth condition.

Since this research focuses on the counterfactual conditional, it is important to recognize that, generally speaking, in a counterfactual conditional, both clauses — and thus the statement as a whole — are interpreted as false (i.e., the events of both clauses did not occur). To limit the scope of conditionals under investigation in the corpus-based stage of the study, only Type 3 conditionals were considered. Both the apodosis and the protasis in Type 3 conditionals are false.

### **Counterfactuality, Regret, and Relief**

Ferguson (1991) discussed the use of the Type 3 construction as a means of communicating regret and relief. He made a case for regret and relief as being two sides of the same coin: In cases of regret, the speaker is unhappy that the counterfactual protasis did not happen, and in cases of relief, the speaker is happy that the counterfactual protasis did not happen. He observed that these ideas are expressed through the Type 3 conditional, noting that distinguishing between regret and relief requires the listener to know what the speaker considers a good or bad result. Ferguson also described the use of mixed conditionals to describe regret and relief. He noted that conditionals expressing regret or relief must have at least three semantic characteristics: (1) a causal link between the apodosis and the protasis, (2) past or present time reference, (3) counterfactual interpretation of at least one clause.

### Type 3 Conditionals

The Type 3 conditional is also called the past counterfactual conditional (Larsen-Freeman & Celce-Murcia, 2017), the unreal conditional (Cowan, 2008), and the “doubly remote conditional construction” (Huddleston & Pullum, 2002, p. 754). This study refers to the Type 3 construction because it clearly limits the construction to two clauses with specific verb conjugations.

The Type 3 protasis traditionally begins with *if* and contains the past perfect form: *had* + past participle. It can also contain *could have* + past participle (e.g., *If I could have been there, I would have helped you*) (Huddleston & Pullum, 2002), but in current English, it does not commonly contain other modal perfect forms,<sup>3</sup> though the use of *would have* is under investigation.

In contrast, the Type 3 apodosis traditionally contains the construction *would have* + past participle but frequently contains other modal perfect forms. *Could have* + past participle (e.g., *He could have saved them if he had arrived in time*), *should have* + past participle (e.g., *If he had lent me money previously, I should have returned the favor*) and *might have* + past participle (e.g., *I might have come if I had seen your message*) each appear in the apodosis with sufficient frequency to warrant mention in grammar reference books (e.g., Huddleston & Pullum, 2002; Quirk et al., 1985).

*Should have* in this context is essentially used as a synonym of *would have*. The use of counterfactual *should have* is generally seen in examples with the subject *I*. This

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<sup>3</sup> Jespersen (1954) referred to the “*If . . . should have* with the second participle” construction in the protasis as “archaic,” e.g., “what a sad thing would that have been, if my lord and I should never have met!” (vol. 4, p. 334).



collocation may be attributed to the previous prescriptive uses of *shall* and *will* (*shall* having been used in place of *will* when the subject was *I* [Oxford Living Dictionaries, 2017; Jespersen, 1954]). *Could have* can also be expressed as “would have been able to” (Swan, 2016, p. 241), which makes its presence in the apodosis natural and its appearance in the protasis worthy of remark.

### **Tense Backshifting**

The use of the past perfect in the protasis is considered an example of backshifting. According to Dancygier (2002), backshifting is the use of a past or perfective marker “to mark hypotheticality, doubt, unlikelihood, or politeness” (p. 356). In the same fashion, counterfactuality can be marked by shifting an action into the past relative to when the action would have occurred, as in *If I had run as fast yesterday as I did in my youth, I would have won a medal* (Declerck and Reed, 2006). Comrie (1986), too, speculated about the use of past time to indicate counterfactuality—he believed that the knowledge of past actions and events is generally more certain, leaving less ambiguity as to the truth or falseness of the statement (p. 90). In using the counterfactual, a speaker is certain that actions or events in the protasis did not take place. According to McFadden and Alexiadou (2006), the temporal distancing occurring in English Type 3 conditionals is a byproduct of the loss of the past subjunctive form.

### **The Original Unreality Marker: The English Subjunctive**

The term *subjunctive* is still used on occasion to refer to unreal conditionals, especially the Type 3 construction (e.g., Ippolito, 2013). This usage appears to be particularly common in the field of semantics. However, this use of the term can be

misleading, as some Indo-European languages also have a subjunctive verbal mood and accompanying form. While English still has some traces of present and past subjunctive forms (e.g., *God save the queen, If I were you*) that differ from indicative forms, Type 3 conditionals have no vestiges of a subjunctive form. Nevertheless, this was not always the case.

### **Past subjunctive before past perfect.**

According to Molencki (1998), Old English (OE) used the past subjunctive “for both present and past contrary-to-fact conditionals”; it did not distinguish morphologically between the two ideas (p. 241). In fact, the perfect aspect was introduced to English during the OE period, but it was not completely grammaticalized (Molencki, 1998).

McFadden and Alexiadou (2006) confirmed that OE and early Middle English (ME) used the past subjunctive, rather than the past perfect indicative, in counterfactual protases, as shown below in an example from *ÆCHom* i.82.28:

*ac hit wære to hrædlic gif he þa on cildcradole acweald wurde*

but it were too quick if he then on child-cradle killed were

“but it would have been too early if he had been killed in his cradle then”

(cited in McFadden & Alexiadou, 2006, p. 243)

However, the subjunctive mood started to disappear from counterfactual clauses and the language in late OE (Molencki, 1998). Even though the verb forms had started to change in OE, in early ME, the past subjunctive was still used in both clauses (Molencki, 1998). It was eventually replaced by periphrastic (compound) structures, such as the past

perfect and past modal + infinitive, in the 13th century (Molencki, 2000). At first, the past perfect subjunctive was used, but the past perfect indicative quickly overtook it, as the subjunctive forms were fading from the language.

### **Other Factors Influencing the Development of the Type 3 Construction**

Molencki (2000) described the development of the Type 3 conditional as a centuries-long battle between parallelism and asymmetry, calling the expression of counterfactuality “one of the most unstable categories” in English (p. 312). In addition to the shift from the past subjunctive to the indicative past perfect, several other changes came to the English Type 3 conditional.

According to Mustanoja (1960), OE originally used both *be* and *have* + past participle in the indicative mood for stative meanings. In early ME, these stative periphrastic verb constructions came to be considered “true perfects and pluperfects expressing action rather than a state resulting from an action” (Mustanoja, 1960, p. 499). *Be* eventually lost its past perfect function, while *have* lost its original stative function. Today, that distinction can be seen in sentences such as *The company was located in Seattle* vs. *The company had located the problem*. The former retained the stative function; the latter kept its past perfect function.

McFadden and Alexiadou (2006) asserted that *be* was usurped by *have* as the sole perfect auxiliary due to the English adoption of the perfect aspect in expressions of past counterfactuality. This claim echoes that of Mustanoja (1960): “In ME, . . . *have* is clearly preferred in hypothetical statements” (p. 502). Further analysis by McFadden and Alexiadou (2006) found that the encroachment of *have* on the territory of *be* in past

counterfactuals was “in fact *not* a single change” (p. 239). It occurred both gradually and simultaneously with other changes.

According to McFadden and Alexiadou (2006), these newly emerging perfect forms with *have* started appearing in place of the past subjunctive in past counterfactual clauses, including in “modal” clauses (i.e., with the verbs *could*, *should*, or *might*, as in *They might have gone to the store*). At that time, they reported, modals were only used counterfactually, so the use of perfective *have* was categorically counterfactual. The past perfect began to mark both clauses of past counterfactuals in the early 13th century. McFadden and Alexiadou (2006), who argued that the verb *come* was the best indicator of the shift in auxiliary from *be* to *have*, noted that “between 1350 and 1420, 64.3% of *HAVE* + *come* perfects are counterfactual or modal, compared with only 18.3% of other intransitive perfects”; between 1420 and 1500, these figures were 90.9% and 26.4%, respectively (p. 243). These figures indicate that instances of the *have* perfect increased as the subjunctive form faded from counterfactual clauses.

According to Molencki (1998), late ME established the obligatory distinction between present and past counterfactuals (using the past tense for present counterfactuals and the past perfect for past counterfactuals), but the parallel tense in both clauses was maintained. When the distinction between present and past counterfactuals was established, the possibility for mixed conditionals was created, and these also started to appear. Exposure to French and Latin may have caused, or at least accelerated, the perfect forms in English (Molencki, 2000; Mustanoja, 1960). As Molencki (1999) observed, they became more prevalent in the 14th century, “when the influence of French

was particularly strong” (p. 99). However, the parallelism of the verb forms in the apodosis and protasis did not last.

Modal verbs, which had started to replace the past subjunctive in the counterfactual apodosis sometime in early ME, became more prevalent in the mid-14th century, replacing the past perfect (Molencki, 2000). Type 3 conditionals started to follow the current standard pattern at a frequent rate in Early Modern English (EModE), and it became the standard by the end of the 18th century (Molencki, 1998).

Nevertheless, parallel past perfect can be found into the 19th century (Molencki, 1998). As Molencki (1999) noted, Görlach (1991) claimed that by the end of the ME period (roughly 1500 CE), the association of the past perfect with unreality was so strong that by the time EModE emerged, even the perfect infinitive was used to indicate “a possible, intended, or unreal action” (Molencki, 1999, p. 98). One example of this phenomenon can be seen in the following excerpt from Caxton (1486):

*And the prour that was voyded and hyyde vnder the bedde wende **to haue take** his breche but he fonde none* (And the prior that had retreated and hid under the bed went to have taken his breakfast, but he found none) (cited in Molencki, 1999, p. 98)

Molencki (1999) noted that these cases were often marked as counterfactual by further textual evidence that the described scenario did not take place, as seen in the final clause of this example.

The association of counterfactuality with the past perfect may also explain why, according to Jespersen (1954), EModE allowed the use of the past perfect in the

counterfactual apodosis: “if thou hadst bene here, my brother had not died” (p. 127). In sum, as Ishihara (2003) noted, “main and subordinate clauses have alternated symmetrical and asymmetrical structures for centuries,” and English may be reverting to symmetrical structures once more (p. 39), as seen in the use of *would have* in both the protasis and the apodosis.

### **Prescriptively Accepted Type 3 Variations**

The Type 3 construction includes a number of variations: (1) the deletion of *if* with subject-operator inversion (e.g., *Had he known . . .*), (2) the ellipsis of the protasis (e.g., *I would go see that movie in a heartbeat*), and (3) the reversal of clause order between protasis and apodosis (e.g., *I would have stayed if I had seen your message* versus *If I had seen your message, I would have stayed*).

While conditional constructions are traditionally marked with *if*, its presence in the conditional sentence is not always obligatory. A prescriptively acceptable grammatical variation of the protasis consists of the deletion of *if* and subject-operator inversion (e.g., *had I known about the accident*). Quirk et al. (1985), Biber et al. (1999), and Huddleston and Pullum (2002) all discussed subject-operator inversion in counterfactual conditional clauses as a traditional, though somewhat formal, variation. On the opposite end of the formality spectrum, researchers have found that entire protases are often deleted when their meaning can be inferred from context, leaving only the apodosis to convey the intended message, as in *I wouldn't have done it that way* (Frazier, 2003; Hudson, 1990; Jespersen, 1954; Quirk et al., 1985). Notably, this reduced construction has the potential to be embedded in a factual protasis, possibly lending

confusion to learners. Nevertheless, although worthy of research, sentences with an *if*-less protasis or a missing protasis are not investigated further in this study.

When both clauses are present, it is an oft-made claim that the unmarked order for conditional constructions is *protasis, apodosis* (e.g., Comrie, 1986; Ford and Thompson, 1986; Haiman, 1978; Haiman, 1986; McCabe, 1983; Polanska, 2006), especially in protases expressing nonreality (Biber et al., 1999). Bailey (1989) believed that initial protases were the unmarked form in all conditionals and cited previous research (his own and that of Mayerthaler [1981]) as proof. According to the corpus research conducted by Biber et al. (1999), protases that create a frame for subsequent discourse, including setting up hypothetical or counterfactual conditions, tend to prefer initial position. The current study examined whether the instances of the variant Type 3 construction occur in a sentence-initial or sentence-final structure.

Given the wide variety of conditional forms discussed so far, perhaps Al Rdaat and Gardner (2017) observed that English conditionals “are considered complex both cognitively and linguistically” because conditional sentences can take many forms outside the traditional combination of the protasis and apodosis (p. 1). Of interest to this study is the usage frequency of yet another variation: the presence of *would have* + past participle in the protasis of a Type 3 conditional.

### **Prescriptively Questionable Variation in Type 3 Conditionals**

As previously discussed, the English Type 3 construction has undergone substantial changes in the past. Presumably, according to the general pattern of language development, each of these changes was considered nonstandard before it was accepted

as a variant form and eventually overtook the prescriptive form to become the standard. The variant *would have* form may eventually become standard, but it is not the only variant auxiliary form appearing in the English Type 3 construction. The other variant Type 3 construction, which must be distinguished from the variant *would have*, is the plupluperfect<sup>4</sup> (e.g., *If I had have known*). This variant is generally claimed to be a feature of British English (*Webster's Dictionary of English Usage*, 1989, inter alia), though the claim has not been quantitatively confirmed. It is important to be aware of both forms when conducting research because *If I had have* and *If I would have* can be contracted to *If I'd have* or *If I'd've* (Huddleston & Pullum, 2002; Lambert, 1986; Palmer, 1986). Thus, *had have* + past participle is important to this research because when the variant form is contracted, distinguishing between an extra *had* and *would* is challenging—an assessment previously made by Jespersen (1954). This overlap in contracted form is difficult to separate; thus, any cases of *If [S] 'd have* or *If [S] 'd've* may have to be excluded from linguistic analyses seeking to distinguish between the two forms.

According to *Webster's Dictionary of English Usage* (1989), the first formal discussion of the variant *would have* as a replacement for *had* in the Type 3 protasis could be found in Griever and Jones's 1924 usage manual, *The Century Collegiate Handbook*. The two authors reported that “our evidence indicates that it does not occur in standard writing that finds its way into print” (cited in *Webster's Dictionary of English Usage*, 1989, p. 966). Of further interest to this study is that the variant form was

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<sup>4</sup> In English grammar, the terms *past perfect* and *pluperfect* are synonymous. Authors who use this term are referring to the additional perfective layer in *had have* + past participle.



described as “notorious in student writing” (cited in *Webster’s Dictionary of English Usage*, 1989, p. 966). Sixty-five years later, the dictionary editors deemed the variant form “a characteristic of informal speech” that is frequently contracted (*Webster’s Dictionary of English Usage*, 1989, p. 966). The editors also hypothesized that the appearance of this form may be linked to the attempt to create a subjunctive variant in a language that makes increasingly little distinction between the indicative and the subjunctive.

Broughton (1986) claimed that “If I would have been,” an example of the variant form analyzed in this study, is in fact the “perfect conditional or perfect subjunctive” (p. 29). While no language researcher or grammarian has echoed Broughton’s sentiments about the “perfect conditional” in previous or subsequent works on the topic, his claims about the subjunctive correspond with the hypothesis of *Webster’s Dictionary of English Usage*.

Hancock (1993), too, postulated that some English speakers seem to use *would have* + past participle as a subjunctive-like version of the past perfect. In her study, she investigated the “encroachment of *if he would have* (or *woulda*)” in speech (p. 241). She claimed that the nonstandard usage seemed to appear in counterfactual *had* + past participle structures, both in *wish* complement clauses and in *if*-clauses, though far more commonly in the latter. Hancock postulated that in counterfactual statements, the past perfect in the apodosis “gave way gradually to the modal auxiliary *would have*” and that the past perfect in the protasis, “for some speakers, is going the same way, restoring a lost symmetry” (p. 246). This attention to symmetrical clauses harks back to the EModE structure that Jespersen (1954) addressed in his discussion of counterfactual constructions

and the OE use of past subjunctive. Hancock's (1993) claims about the presence and relative frequency of *would have* in the Type 3 protases and the PCWCC are under analysis in this research project.

Ishihara (2003) lamented the paucity of references in the literature that discuss the presence of *would have* + past participle in the Type 3 protasis. Indeed, the variant *would have* form is mentioned in some comprehensive grammar reference books (Garner, 2009; Huddleston & Pullum, 2002; Quirk et al., 1985), but in others, it is not (Biber et al., 1999; Jespersen, 1954). Huddleston and Pullum (2002) stated that the *would have* variant is common in informal speech but is still considered nonstandard (p. 752). Garner (2009) described *would have* in the protasis as “an example of a confused sequence of tenses. . . . *Would have* [+ p.pl.] for *had* [+ p. pl.] is especially common in the Southwest, probably from contamination by *could have* [+ p. pl.]” (p. 870).

To fill the gap in research on the variant form, Ishihara (2003) conducted a two-part study. In the first part of her study, she examined the frequency of *would have* + past participle in counterfactual (Type 3 and PCWCC) constructions in the speech of nine Midwestern U.S. speakers of various occupations, ages 19-77. Participants for the Type 3 production data were recruited mostly at a dinner party in Minnesota; others were individually interviewed. The participants were asked to provide humorous counterfactual sentences for ESL teaching materials. They were given examples of the construction, though it is not clear whether any variant examples were provided. Ishihara found that the variant construction was quite prevalent in the sentences produced: 52% of the given structures were standard, 41% contained *would have* in the protasis, and 7%

contained the simple past in the protasis. Due to her data collection method, which involved providing sample sentences to elicit more examples of the construction, her results may be skewed; however, they are proof that the participants did not believe the *would have* model needed correction.

In the second part of her study, Ishihara (2003) recruited 100 native English speakers from outside the TESOL profession (80 Midwestern, 20 other U.S.), and 20 ESL professionals (ESL teachers or TESOL master's students, late 20s-50s, majority Midwest) to complete a grammatical judgment reading activity that included variant *would have* and other grammatical errors as distractors. The reading was presented as an informal dialogue. Most of the non-ESOL participants rated the two *if . . . would have* sentences as correct (87% and 77%, respectively). Of those, five people and three people, respectively, stated that they would not personally use the *would have* form. In contrast, only 30% of the ESOL professionals found the *if . . . would have* sentences acceptable.

The acceptability of *if . . . would have* sentences does appear to be gaining some level of acceptance in Standard English. Garner (2009) categorized *would have* in the Type 3 construction as Stage 3 in his five-stage ranking (he ranked *had have* as Stage 2). Stage 3 he defined thus: "The form becomes commonplace even among many well-educated people but is still avoided in careful usage" (p. xxxv). Examples of Stage 3 include using "*\*miniscule* for *minuscule*" and "*\*infer* to mean *imply*" (p. liv). In other words, Garner considered *would have* to be colloquial (and *had have* to be nonstandard).

Garner's "Stage" rankings were based on the four stages presented in *Current American Usage* (Bryant, 1957), which was crafted from the results of "over 900 specific

surveys conducted by English teachers in the 1950s”; the usage panels of *American Heritage Dictionary*, *Harper’s Dictionary of Contemporary English Usage*, and *Merriam Webster’s Dictionary of English Usage*; the corpora Google Books, WESTLAW, NEXIS, and the Oxford English Corpus; correspondence with “acknowledged experts” and “thousands of language-lovers”; a 100+-member panel of “critical readers”; and his own judgment (pp. lv-lvi). Stage 1 is the first appearances of a new form, Stage 2 is its proliferation (though still stigmatized), Stage 3 is its acceptance into casual usage, Stage 4 is its frequent appearance in educated language (though still corrected when noticed), and Stage 5 is the near-total acceptance of the form except by unrelenting sticklers. This study’s research seeks to determine whether the assessment by Garner and others of the status of *would have* still holds.

### **ESOL Materials Addressing the Type 3 Construction**

The accurate presentation of current Type 3 construction form, meaning, and use to ESOL students is the ultimate goal of this research. Thus, it is important to include an evaluation of current pedagogical materials to which ESOL students are exposed.

### **ESOL Presentation of the Form of the Type 3 Construction**

Table 2 lists the topics commonly addressed by the textbook authors consulted for this study. Further elaboration on these and additional topics follow.

Table 2

*Type 3 Protasis Forms Presented in ESOL Textbooks*

Textbook	Canonical Type 3 form	<i>could</i> <i>have</i>	<i>might</i> <i>have</i>	<i>may</i> <i>have</i>	Variant <i>would</i> <i>have</i>
Azar & Hagen (2017)	X	X			X
Blass et al. (2012)	X	X	X	X	
Broukal (2010)	X	X	X		X
Cooper and Eckstut-Didier (2014)	X	X	X		
Cowan (2008)*	X	X	X		X
Fuchs and Bonner (2012)	X	X	X		X
Larsen-Freeman and Celce-Murcia (2016)*	X	X	X		X
Maurer (2012)	X	X	X		X
Murphy (2012)	X	X	X		X
Swan (2016)**	X	X	X		X

\*Textbooks for ESOL teachers

\*\*ESOL grammar reference books

All ten of the ESOL textbooks and reference books addressed the standard Type 3 form. Eight of the books addressed the *would have* + past participle structure under investigation as a colloquial variant of the Type 3 protasis. In their latest edition, Azar and Hagen (2017) described the variant as a feature of “casual, informal speech” that is “generally considered to be grammatically incorrect in standard English, but it occurs fairly commonly” (p. 432). Similarly, Larsen-Freeman and Celce-Murcia (2016) dedicated a chapter endnote in their grammar textbook for ESOL teachers to discussing the increasing presence of *would* in the protasis, noting that prescriptive grammars label it as “unacceptable in formal English,” but that “double *would* conditionals do occur increasingly” in informal English, in both spoken and written forms (p. 603). Meanwhile,

Fuchs and Bonner (2012) called it a construction that “[s]ometimes speakers use,” but they noted that it is “often considered incorrect, especially in formal or written English” (p. 387), and Broukal (2010) pronounced it a regional American variant whose “usage is not generally considered to be grammatically correct,” though not specifying which region she had in mind (p. 423).

Perhaps in an attempt to please both descriptivists and prescriptivists, Cowan (2008) dedicated half a page to this “change that is becoming extremely common in spoken American English,” describing its presence as “pervasive” and recommending that ESOL teachers discourage their students from using the form in writing, since the form is not a part of “‘educated’ English” (p. 457). Maurer (2012) referred to the *If [S] would have + past participle* form as a construction to avoid, but made no indication of its native colloquial usage. Swan (2016), a British author, acknowledged the variant forms “If you would have asked me” and “If you asked me” in the discussion of the Type 3 construction but presented them crossed out (indicating that the forms were wrong) with no mention of regional variance (p. 241). Murphy (2012), also British, stated that *would + infinitive* and *would have + past participle* are not appropriate in the protasis.

Table 3 illustrates which of the ESOL textbooks and reference manuals address the standard form variations applicable to Type 3 conditionals, as well as whether mixed conditionals are discussed in the books.

Table 3

*Type 3 Form Alterations Presented in ESOL Textbooks*

Textbook	Contracted auxiliary	Subject- operator Inversion	Clause reversal	Mixed conditionals
Azar & Hagen (2017)	X			
Blass et al. (2012)	X			X
Broukal (2010)		X	X	
Cooper and Eckstut-Didier (2014)	X			X
Cowan (2008)*	X	X		X
Fuchs and Bonner (2012)	X			X
Larsen-Freeman and Celce-Murcia (2016)*	X	X	X	X
Maurer (2012)		X		X
Murphy (2012)	X		X	X
Swan (2016)**	X		X	X
*Textbooks for ESOL teachers	**ESOL grammar reference books			

Eight of the textbooks and reference books discussed the possibility of contracting the auxiliary verb, both in the apodosis and in the protasis. Six of the books discussed syntactic reordering in the form of clause reversal or subject-operator inversion. Eight of the books addressed mixed conditionals, usually with past reference in the protasis and present reference in the apodosis (e.g., *If I hadn't stayed up too late, I wouldn't be tired*). Two ESOL textbooks presented alternate sentence patterns for the Type 3 form. Fuchs & Bonner (2012), in addition to addressing the past counterfactual as a statement, also explained how to formulate it as a *yes-no* question or as a *wh-* question. Maurer (2012) presented *if only* alongside the Type 3 construction because it requires a counterfactual form.

## ESOL Presentation of the Meaning and Use of the Type 3 Construction

According to Swan (2016), the Type 3 construction is used in unreal past situations (“past situations that did not happen”) and “present and future situations that are no longer possible” (p. 241). Most ESOL textbooks appear to address only the past applications of the Type 3 construction, which is understandable but potentially insufficient for advanced learners. For the sake of concision, a chart of commonly cited Type 3 meanings is provided in Table 4.

Table 4

### *Type 3 Meanings Presented in ESOL Textbooks*

Textbook	refers to past	unreal/ counter -factual	imagined	impossible
Azar and Hagen (2017)	X	X		
Blass et al. (2012)	X	X		
Broukal (2010)	X	X	X	
Cooper & Eckstut-Didier (2014)	X	X	X	X
Cowan (2008)	X	X	X	X
Fuchs and Bonner (2012)	X	X		
Larsen-Freeman and Celce-Murcia (2016)	X	X		
Maurer (2012)	X	X	X	X
Murphy (2012)	X	X		
Swan (2016)	X	X		X

All 10 of the ESOL textbooks indicated that the Type 3 construction refers to the past and expresses unreality. Aside from the near unanimity of the authors regarding the meaning of past unreality in Type 3, the presentation of additional Type 3 meanings varies. Four of the 10 books indicated that the construction expresses imagined events. Of



those four, three referred to its expression of impossibility, as did another book among the 10, resulting in a total of four. Furthermore, Fuchs and Bonner (2012) and Maurer (2012) denoted that the Type 3 construction expresses regret.

In addition to the meanings discussed above, which focus on the whole construction, two textbooks explained the meaning of each clause separately: According to Blass et al. (2012), “[t]he *if* clause expresses the past unreal conditional (a situation that was untrue in the past). The main clause describes an imagined result” (p. 342). Similarly, Cooper and Eckstut-Didier (2014) claimed that “[t]he *if* clause gives the condition, and the main clause gives the result” (p. 379).

The use of the Type 3 construction was sometimes explained via practice activities. Broukal (2010) used the context of a complaint letter followed by an apology letter. In her section on “Conditional Sentences Without *If*,” she also included an activity asking students to rewrite implied conditionals (e.g., *Without my keys, I wouldn’t have been able to unlock the door* or *I’m glad I have my keys; otherwise, I wouldn’t have been able to unlock the door*) as direct conditionals (e.g., *If I hadn’t had my keys, I wouldn’t have been able to unlock the door*) and vice versa. Azar and Hagen’s (2017) activities reflect actions people could have taken to prevent problems; they included a specific activity focusing on the use of “If I had known,” which is a common expression of past counterfactuality.

### **Summary of Conditionals and the Type 3 Construction**

Given the length and complexity of the previous discussion of conditionals, a summary of the major ideas is in order. The term *conditional* can refer to the grammatical

construction, the semantic expression of condition, or the modal verb *would* when used in a hypothetical manner. For the purposes of this study, the first definition has been used. The conditional construction is often presented in ESOL materials and other fields as having three or four types, though there are many more tense and aspect combinations that are prescriptively permissible in the form. Past counterfactual conditionals are expressed through the Type 3 conditional construction.

The Type 3 form allows for variations, such as subject-operator inversion with *if* deletion, protasis deletion, and the reversal of protasis and apodosis. The origin of the tense backshift in the protasis has strong ties to the loss of the now defunct past subjunctive form, which had a briefly existing perfective form in late Middle English, the past perfect subjunctive. The Type 3 conditional is a particularly volatile construction in English; it has shifted between parallel verb forms and contrasting verb forms in the apodosis and protasis for over a millennium. The variant *would have* + past participle construction in the Type 3 protasis, the latest trend toward verbal parallelism in the Type 3 construction, has been previously discussed by other researchers but rarely examined closely. Some researchers claim that it is an attempt to replace the lost subjunctive form; others claim that it is an American English variant and that the corresponding British variant (also of unknown frequency) is *had have* + past participle. These forms can both be contracted to *'d have* or *'d've*, which is an important consideration for any researcher seeking to study either of the forms.

In ESOL materials, the Type 3 form is regularly presented in its canonical form and with *could have* or *might have* in the apodosis, with contracted *have* auxiliaries in

either clause, and with clause reversal; other details are less common. The variant form is presented in several of the books reviewed. The commonly presented Type 3 meaning is the description of unreal events in the past. Two textbooks and some researchers also address the construction's use in the expression of regret. Another construction that meets this latest descriptor and shares many features in common with the Type 3 construction is the PCWCC construction.

### **The Past Counterfactual *Wish* Complement Clause in English**

According to Cook (1965), two complements of the verb *wish* include perfect forms. When a complement of *wish* includes the past perfect, it is used to express counterfactual wishes about the past: *I wish someone had been here to help me set up*. Essentially, the complement is equivalent to the Type 3 protasis: *If someone had been here to help me set up, my wishes would have been fulfilled*. When a *wish* complement clause includes the perfect form of modals of possibility (i.e., *could have* and *might have*), it also expresses counterfactual wishes: *I wish someone could have been here to help me set up*.

The PCWCC prototypically contains the past perfect in the complement clause (e.g., *I wish you had visited me*), but the second construction shows that modal perfect forms can also be used in the complement clause. Larsen-Freeman and Celce-Murcia (2017) claimed that the latter type of complement is “similar to counterfactuals in that the same clauses that follow *wish* can also function as either the *if* clause or the result clause of a counterfactual conditional” (i.e., either the protasis or the apodosis) (p. 588).

However, this assessment is worthy of questioning for two reasons: (1) *Could have* + past

participle can appear in the Type 3 protasis, as in *If my wishes could have been fulfilled, I would have won the lottery*, as well as the apodosis, as in *If my wishes had been fulfilled, someone could have been here to help me set up*. (2) Their explanation does not indicate whether they consider *wish [S] would have* + past participle a variant form.

Like the Type 3 protasis, the first and perhaps most common PCWCC form relies on backshifting from the past tense to the past perfect to express past hypotheticality, doubt, unlikelihood, or counterfactuality. Dancygier (2002) confirmed that the backshifting phenomenon is used with expressions like “*I wish*” (p. 356). Huddleston and Pullum (2002) claimed that the complement clauses of *wish* “have counterfactual interpretations” (p. 1003). Similarly, Quirk et al. (1985) discussed the *wish* complement alongside conditionals as a hypothetical construction. Ishihara (2003) claimed that the Type 3 conditional and the PCWCC are “related” (p. 22). Additional evidence of the form-based tie between the two structures is that the PCWCC briefly used the past perfect subjunctive in its complement clause in late ME at the same time it was used in the Type 3 construction (Mustanoja, 1960).

### **Variations in the *Wish* Complement Clause**

As Ishihara (2003) found in her study, the presence of *would have* in the PCWCC is barely discussed in the literature, though the grammar checker in Word 2016 continues to mark it as an error. Many of the grammar reference books that address the counterfactual complementation patterns of *wish* exclude reference to *would have* (e.g., Biber et al., 1999; Quirk et al., 1985; *Webster’s Dictionary of English Usage*, 1989). Among the 33 books referenced in Ishihara’s study, only three mentioned the variant

construction, all of which were ESOL materials and two of which described it as an informal variant. In his intermediate ESOL textbook, Murphy (2000) forbade the presence of *would have* in the PCWCC, stating, “You cannot use *would have* after *wish*” (p. 72). Murphy (2012) changed the wording of his advice to “Do not use *would have* . . . after *wish*” (p. 80), maintaining the proscription.

Contrary to the advice offered by prescriptivists, Ishihara (2003) found that *would have* + past participle in a *wish* complement clause appears in American English speech at a high rate and is accepted as normal by an even higher percentage of native speakers. In her analysis of native production of the PCWCC construction, she interviewed nine people individually, five of whom were Midwestern American citizens “of various occupations” and four of whom were native English-speaking ESOL professionals (p. 30). Participants were asked to talk about “something minor in the past that did not go as well as they had hoped or something that they regretted doing or not doing” (p. 30). She found that 52% of the produced PCWCCs contained *would have*, while the other 48% contained either *had* or *could have*.

Ishihara’s study of 120 native speakers’ assessments of the PCWCC construction (100 informants from a range of ages and occupations, 20 ESL teachers or TESOL master’s students) in the informal dialogue judgment activity showed that over 80% of the civilians and about half of the TESOL professionals (45% for one instance of the form, 60% for the other) did not deem the *wish [S] would have* + past participle construction incorrect. Given her results, she concluded that the form should be taught to ESOL students who are likely to interact with native English speakers.

The acceptability of the variant PCWCC could be influenced by constructions that are similar to it. The *wish* complement clause that includes a future reference allows *would* in the complement clause (e.g., *I wish he would bring flowers to my house sometime*). As Ishihara (2003) noted, *wish* allows *would* in its complement for upcoming desires, so why not allow *would have* + past participle as the past equivalent? This transfer might also occur because the past tense of the main verb and *would* + main verb are interchangeable in the *wish* construction with a counterfactual present reference (e.g., *I wish she would call me more often* versus *I wish she called me more often*) (Quirk et al., 1985). Furthermore, Larsen-Freeman and Celce-Murcia (2017) claimed that the *wish* complement clause can be linked to either the protasis or the apodosis of the Type 3 construction, which, without further specification, would include *would have* + past participle. Certainly, their discussion of the link between the Type 3 and PCWCC constructions supports the joint analysis of the two constructions.

### **ESOL Perspectives on the *Wish* Complement Clause**

The *wish* complement is less thoroughly discussed in ESOL grammar texts than the Type 3 construction, though it is not entirely absent. When it is addressed, it is usually linked to the Type 3 construction (e.g., Blass et al., 2012; Cooper & Eckstut-Didier, 2014; Larsen-Freeman & Celce-Murcia, 2016; Maurer, 2012). Nine of the ten ESOL grammar textbooks and reference books listed in Table 5 address the PCWCC construction; Cowan (2008) did not, as indicated in the table.

Table 5

*Presented Forms of the PCWCC*

Textbook	Optional <i>that</i>	Tense backshift	Variant
Azar & Hagen (2017)	X	X	X
Blass et al. (2012)	X	X	
Broukal (2010)	X	X	
Cooper and Eckstut-Didier (2014)		X	
Cowan (2008)*	--	--	--
Fuchs and Bonner (2012)		X	
Larsen-Freeman and Celce-Murcia (2016)*	X	X	
Maurer (2012)	X	X	
Murphy (2012)		X	X
Swan (2016)**	X	X	X
*Textbooks for ESOL teachers		**ESOL grammar reference books	

Three books expand on the topic of the Type 3 form to address the PCWCC. In addition, as previously discussed, Larsen-Freeman and Celce-Murcia (2016) claimed that the PCWCC can be formed from the protasis or apodosis clause of the Type 3 conditional. Fuchs and Bonner (2012) advised students to “use *wish* + past perfect to express regret or sadness about things in the past that [the subject] wanted to happen but didn’t” (p. 387). Azar and Hagen (2017) noted the variant form as “incorrect in formal English” (p. 445). Murphy (2012) instructed learners not to use *would have* in the PCWCC.

The nine books that address the PCWCC form also address its meaning—some briefly, others more thoroughly. The topics addressed and summarized in Table 6 are past

desire, current desire, the use of the construction to express regret, and the counterfactuality of the construction.

Table 6

*Presented Meanings of the PCWCC*

Textbook	Past desire	Current desire	Express regret	Unreal or CF
Azar & Hagen (2017)		X		X
Blass et al. (2012)		X	X	X
Broukal (2010)	X	X	X	X
Cooper and Eckstut-Didier (2014)			X	
Cowan (2008)*	--	--	--	--
Fuchs and Bonner (2012)	X		X	X
Larsen-Freeman and Celce-Murcia (2016)*				X
Maurer (2012)		X	X	X
Murphy (2012)		X	X	
Swan (2016)**	X	X	X	X

Most textbooks agree that the PCWCC is indeed counterfactual and expresses regret. Four books state that the construction expresses only current desires, two state that it expresses both current and past desires, one states that it expresses only past desires, and two do not address desire as a semantic feature of the construction.

### **Use of Corpora in Language Research**

This study is relying partially on corpus data to assess the frequency of the two target variant forms: *If . . . would have* + past participle and *wish (that) [S] would have* + past participle. It is thus important to explain why corpora are used and trusted in language research and what limitations they have.



According to Cheng (2012), a corpus is essentially a computerized database of language that has been assembled for a specific purpose. Even if that purpose is broadly *language research*, there is an intentional inclusion (or exclusion) process; for example, most corpora include only one language, and the included discourse is intended to be representative of the scope of the target usage. Corpora can be selective by features such as mode (usually spoken or written), genre (e.g., fiction, news, academic journal articles, student papers, or instant messages), register (e.g., academic, business, or familiar), time (current discourse or a specific historical period only), dialect (e.g., British English, Australian English, and Hong Kong English) or background of speakers (e.g., college-level Japanese ESL learners).

In general, written texts in modern corpora will be tagged for parts of speech so that a researcher can look for collocations and phrases; this feature is also known as a concordancing program. For example, researchers looking for idiomatic expressions could search for “in a [nn]” and get the results “in a bind,” “in a pickle,” and “in a jiffy,” along with myriad nonidiomatic uses, such as “in a car,” “in a building,” “in a month,” “in a cup,” and “in a stack.” This tagging system also allows the system to distinguish between homographs, such as *bear* (v.) and *bear* (n.) or *down* (adv.), *down* (part.), *down* (prep.), and *down* (n.), marking them as separate “types,” i.e., distinct single graphic words (Youmans, 1990). The search results in a corpus will usually appear as a concordance list, which is a displayed list of data featuring the “type” and each permutation of the type—known as a “token,” along with the context in which the token appears (Youmans, 1990). Figure 2 is an example concordance list with *concordance* as

the type, gathered from COCA. Each occurrence of *concordance* is a token, resulting in 12 tokens in this list.

in 8 contigs, all correctly identified as the correct subtype. We found strong <b>concordance</b> in contiguous sequences and PCR fragments for each mega-ampl
Illumina platform using additional confirmatory methods. Because previously published studies have indicated very good <b>concordance</b> of the Illumina 450
1992), expecting and receiving explicit external direction from instructors and subsequently assessed for <b>concordance</b> with external expectations. Student
corpus of 427 mission statements from 2004. Results:Keywords analysis, collocation analysis, and <b>concordance</b> analysis suggest that mission statements h
analysis statistically identified discourses potentially indicated by these keywords, and (c) qualitative <b>concordance</b> analysis further refined the results. Findi
which may mark salient discourses (Baker et al., 2008). Then, <b>concordance</b> lines are analyzed qualitatively as a means of verifying or further refining statist
analysis to identify discourses potentially indicated by these keywords, and (c) qualitative <b>concordance</b> analysis to refine the analysis and categorize salien
word as used in context, and this is often done through collocation analysis and <b>concordance</b> analysis. These methods constituted the second and third la
.001 and p<.0001 levels.Concordance AnalysisAs a final layer of interpretation, I conducted a <b>concordance</b> analysis of each keyword and negative keyword
listed on Tables 1 and 2. Baker (2006) noted that " a <b>concordance</b> is simply a list of all the occurrences of a particular search term in a
of meaning in the data (Baker, 2006). Through this process, <b>concordance</b> data were grouped into semantic categories, or groups of words that were deterr
practices, and (d) curriculum goals. Each is described below.Credentialing StructuresCollocation and <b>concordance</b> analyses suggested that the word degree

Figure 2. Concordance list of *concordance*. Retrieved from the Corpus of Contemporary American English, 2018.

Depending on the design of the corpus, if the type is a lemma (i.e., the base form, such as a singular noun, a verb infinitive, or an adjective without comparative or superlative suffixes), sometimes the corpus will also allow inflected forms in the results. For example, searching for *go* might also bring up *goes* and *going*, and sometimes the corpus is even designed to display alternative word bases like *went* as well.

Cheng (2012) explained that corpus linguistics has two branches: corpus-based studies, which use corpora as a tool to answer research questions, and corpus-driven studies, which look for patterns in a concordance list. This study is classified as corpus-based because the corpus is being used to test a previously determined research question. The term *corpus linguistics* itself is used in two ways: Corpus-based studies would consider the term to refer to a method of studying language, equivalent to surveys, interviews, or other data collection. In contrast, corpus-driven studies consider *corpus linguistics* to be a field of linguistics equal to historical linguistics or sociolinguistics;

from this definition comes the role of a corpus linguist. This study is using corpus linguistics as a method, though acknowledging that corpus linguistics as a field is worthy of its own branch of linguistics.

One limitation of a concordancing program is that it can only filter results as finely or accurately as its design allows it to; as a result, human readers must sort through the results to confirm that each item is indeed the usage or structure that they seek. In theory, all corpus studies involve such oversight, though practice may differ. Due to the limitations of the COCA search filters, all corpus results located by this search were examined by two researchers before being counted.

### **Use of Surveys in Language Research**

As McKay (2006) observed, the term *survey* can refer to written or aural data, but usually refers to written responses. Surveys can be used to gather information about learners' knowledge, learning strategies, or affective variables and are an efficient research method for many studies in terms of cost and time investment (McKay, 2006). However, surveys can prove ineffective if learners provide answers that they believe the researcher wants or if the questions are too vague. Thus, filler questions should be included so that the participants cannot identify the target of the research (Mackey & Gass, 2005). It is equally important that the survey not be too long to avoid participant fatigue. Biased, embarrassing, or leading questions can also distort or inhibit the results of a survey, as can negative questions (e.g., *True/False: English is not a difficult subject for me*) or double-barreled questions (e.g., *Agree/Disagree: I find grammar boring and speaking easy*) (McKay, 2006). All of these features are avoided by researchers as much

as possible since, as Crano, Brewer, and Lac (2014) noted, “the central goal of most survey research is to provide sample estimates of population values that are as accurate as possible” (p. 219).

McKay (2006) observed that surveys often contain open-ended questions, in which the participant chooses the form and wording of his or her response, and close-ended questions, in which the possible answers are provided. Open-ended questions include fill-in-the-blank exercises, such as the production section of this study’s survey, or short answers, such as the demographic question inquiring how the participants’ nonnative parent or parents learned English. Close-ended questions on the survey include those with yes-no answers, such as “Are you a native English speaker?”; those with Likert scales, of which an approximation was made for the grammaticality judgment section of the survey; and those with a list of categories, as seen in the possible regions of origin provided in the demographics section.

Mackey and Gass (2005) noted that acceptability judgments, in which students rate the grammaticality of sentences containing the target topic, can also reflect students’ linguistic knowledge. Unfortunately for the validation of this study, no single type of Likert scale has been established in language research; some researchers use a four-point scale to avoid neutral answers, while others use the traditional five-point scale, and some even use a seven-point scale (Mackey & Gass, 2005).

### **Application of Theory to Methodology**

The survey created for this study incorporated the information reflected in the literature that has been reviewed for this project. There is substantial fluctuation in the

acceptance of the variant form in both constructions (Broughton, 1986; Garner, 2009; Ishihara, 2003, *inter alia*). Because the Type 3 and PCWCC constructions have been linked formally and pragmatically (Ishihara, 2003; Larsen-Freeman & Celce-Murcia, 2017, *inter alia*), including the presence of the variant form (Ishihara, 2003), both constructions were included in the survey. The survey design also included sentences with adverbials and irregular past participles in an attempt to discourage interpretations that included mixed temporal settings, as mixed constructions are possible in counterfactual settings (Declerck & Reed, 2006). The variable of protasis order (Biber et al., 1999, *inter alia*) was considered in the survey in the Type 3 construction, as were the effects of noun phrase type in both constructions and the presence of the *that* complementizer in the PCWCC; none of these variables have been previously investigated in studies of the variant form.

## CHAPTER III

### METHODOLOGY

This study consisted of two data collection methods: both corpus data and survey data were collected. The corpus data served as a quantitative baseline to show current percentages of the use of the two target variant structures, as well as their change over three periods: 1990-1994, 2000-2004, and 2010-2015. The survey data were collected to facilitate the investigation of current usage patterns among traditional undergraduate college students, as well as their perceptions of the prescriptive and target forms.

#### **Corpus Description**

The Corpus of Contemporary American English (COCA) is an online language database compiled by Mark Davies and his team at Brigham Young University. The corpus is updated every five years; as of the conducting of the data analysis, it consisted of 520 million words of spoken, academic, literary (fiction), popular magazine, and journalistic English printed or uttered between 1990 and 2015, with an equal number of words from each year in the range. The data have been metalinguistically tagged, enabling researchers to look up specific linguistic structures and analyze them. COCA claims to be the widest-used and largest corpus available to researchers at no cost, and its pedagogical use is promoted among TESOL professionals.

#### **Corpus Data Collection**

To collect data for this study, the following strings were entered into the COCA corpus's search engine:

If [collocate with up to 9 words in between] would have [vvn\*]

Example: *If something horrible like this **would have** happened . . .*

If [collocate with up to 9 words in between] had [vvn\*]

Example: *If someone from the New York Times **had** worked . . .*

wish\* [collocate with up to 9 words in between] would have [vvn\*]

Example: *He **wishes** Governor Hickenlooper's*

*compromise **would have** gone further . . .*

wish\* [collocate with up to 9 words in between] had [vvn\*]

Example: *I **wish** that the owner of the diner **had** yelled at the mother or the father . . .*

### Corpus Data Analysis

Two registers of COCA were chosen for analysis in this study: the spoken register and the academic register. To investigate potential linguistic change over time, three time spans were selected and categorized separately for each construction: 1990-1994, 2000-2004, and 2010-2015. Due to the nature of the search engine, which required exact phrases to be entered, results with negated embedded clauses (*wouldn't have [vvn\*]*, *would not have [vvn\*]*, *hadn't [vvn\*]*, and *had not [vvn\*]*) were excluded from the search results, as were all results in which the target auxiliary was in contracted form.

Aside from the structures that were excluded from the results due to study design, several structures had to be eliminated from the results due to the nature of the main clause or the adverbial clause. Results containing adverbial *if*-clauses were subsequently filtered by the researchers in order to exclude structures such as the following: [S] do\*n't know if [n\*] would have [vvn\*] (e.g., *John doesn't know if cleats would have helped him*

*win that race*) and other main clauses of which the verb was in the *unknown* semantic network, namely *be unsure if*, *have no idea if*, *doubt if*, *not be clear if*, *not be certain if*, *imagine if*, *ask if*, and *wonder if*. Also eliminated from the results were verbs that indicated in context that the subject was in the process of discovering the truth. Verbs excluded were *determine if*, *check if*, *find out if*, *report if*, and *tell [someone] if*. Other excluded structures were *even if*, *only if*, *if only*, *what if*, *how about if*, and the reduced clauses *if so*, *if not*, and *if anything*.

The remaining data were tagged for separate categories. For both the Type 3 and the PCWCC, the categories of *noun subject* and *pronoun subject* were created. For the Type 3, the categories of *initial protasis* and *final protasis* were also established. For the PCWCC, the categories of *that-inclusion* and *that-deletion* were designated.

Because this study focused on the canonical Type 3 and the PCWCC, both the corpus data analysis and the survey excluded past counterfactual conditional constructions that contained *could have*, *should have*, *may have*, or *might have* in place of *would have* in the apodosis, as well as any examples that contained mixed conditionals (i.e., any modal in place of the modal perfect *would have*) or only the protasis (i.e., any sentence without an apodosis).

The International Business Machines Statistical Package for the Social Sciences (IBM SPSS) was used to statistically analyze the corpus data. For both constructions, the significance of noun versus pronoun subject in variant and prescriptive results was analyzed, and the Type 3 construction was also examined for frequency of initial protases



in the variant and prescriptive categories. The PCWCC was also evaluated for the significance of the presence of the *that* complementizer.

### **Survey Description**

The survey used in this study (see Appendix A) was approved by the Human Subjects Review Committee (Central Washington University's institutional review board) as an exempted study. It consisted of a demographics section, a fill-in-the-blank verb-form section, and a multiple-choice section asking participants to judge the acceptability of a variety of forms. The demographics section determined whether participants and their parents or guardians were nonnative speakers of English, where and how their parents or guardians learned English (if nonnative), whether the participants or their parents or guardians spoke another language, and which regions of the U.S. the participants were raised in, if applicable.

The fill-in-the-blank section asked participants to provide the auxiliary form(s) in front of contextualized past participles, both in the protasis of the Type 3 construction and in the PCWCC. The subjects of the target clauses in the sample *wish* sentences were split into equal categories of pronoun subject and noun phrase (article + noun) subject. The survey also provided an equal number of examples of *wish* + *that* + [S] and *wish* + [S] to see if the presence of the complementizer had any effect on participant responses. Due to the limitations of reasonable survey length and for the sake of simplicity, only the present tense of *wish* was included in the survey. In the fill-in-the-blank section, the subjects of all Type 3 clauses and the *wish* verb were pronouns. As a result, this section of the survey had a 3x3x2 variation, resulting in 18 sample sentences. The judgment

portion of the survey asked participants to read 16 sample sentences and place each one into whichever of 5 categories matched their perceptions of the sentence: archaic/antiquated, formal/academic, commonplace/normal, colloquial/informal only, and jarring/unacceptable.

### **Participants**

Participants in the target population for this survey were adults between the ages of 18 and 25 of approximately equivalent English who had not studied English grammar at a university level. Because of their accessibility, the 203 participants who completed the survey were undergraduate students between the ages of 18 and 25 who were enrolled in English 101 or English 102 courses at Central Washington University. Five sections of English 101 and five sections of English 102 participated in the survey. Based on the survey demographics, participant responses were grouped and contrasted according to region of origin and native-speaker status, as well as to the native-speaker status of their parents. Due to the representation of the accessible population, the variable of British versus American English speakers could not be explored in this sample. Owing to the complexity of the topic of gender and the difficulty of determining which gendered discourse community each participant was a member of, gender was also not considered in this study.

### **Survey Data Collection**

A pilot study was conducted in fall quarter of 2017 to test the survey process. One section of English 100T (a developmental course) was surveyed with the assumption that using a lower-level class would establish a useful baseline for the amount of time that

students would need to complete the survey and the level of clarification of written or oral instructions that needed to take place. All students in the 100T section were noted and subsequently excluded from the 101 survey the following quarter.

### **Survey Data Analysis**

The survey data were coded and recorded in Excel and subsequently analyzed through SPSS for two demographic variables: participants' first language and the first language of participants' parents. The multilingual variables were deemed insignificant (see Chapter IV). The fill-in-the-blank section was also statistically analyzed for the linguistic variables of Type 3 or PCWCC, order of clauses (Type 3), presence of *that* complementizer (PCWCC), and noun or pronoun subject (PCWCC). The variable for type of subject NP in the Type 3 construction could not be analyzed in the fill-in-the-blank section because none of the Type 3 example sentences in that section had nouns as subjects. Because the corpus data excluded all auxiliary verbs aside from variations of *had* and *would have*, all participant responses that did not conform to one of these two categories were not considered for the results.

Due to the nature of the sentences chosen for the judgment task, the questions in the multiple-choice judgment section were divided into five categories for analysis: standard Type 3 constructions, variant Type 3 constructions, standard PCWCC constructions, variant PCWCC constructions, and sentences with nonstandard past participial forms (which acted as distractors and controls for participants' grammatical perception). Student acceptance of each structure was calculated using the number of "commonplace/normal" responses.

## CHAPTER IV

### RESULTS AND DISCUSSION

Chapter IV presents and discusses the results of the student survey and the results from the corpus investigation. First is a discussion of the demographic distribution of the survey participants. Next, the Type 3 construction results from both the production section and the judgment section of the survey are examined, followed by a comparison with the corpus results sorted by genre (academic or spoken). The same sequence is then followed for the PCWCC construction.

#### **Demographic Results**

The survey results are presented by demographic category. Though included on the survey, participants' other languages and those of their parents were deemed unnecessary variables and were not included in the analysis. The justification for this exclusion is that (1) nativeness is more informative than multilingual status, and (2) the sample sizes of nonnative participants and native participants with nonnative parents were small enough that further division would make statistical analysis of further subcategories pointless.

The 203 participants were categorized by region of origin, first language (L1), and number of parents or guardians (P/G) whose second language (L2) is English. The number of L2-English parents was used as a descriptor rather than the number of L1-English parents because three participants had single parents whose first language was English, and these participants were included in the same group as those who had two L1-English parents. The majority of the participants were native English speakers with

two L1-English parents, but 10 participants had one nonnative parent and one native parent, 18 had two nonnative parents, and 23 were nonnative English speakers. All participants in this study were between the ages of 18 and 25.

Due to the minuscule number of responses from other U.S. regions, all participants who did not circle Western U.S. (15 surveys) were excluded from the analysis. Three additional surveys not listed in the chart were excluded from the analysis because they were not completed properly. Thus, a total of 185 surveys were included in the study.

The four demographic groups were given group names for the sake of concision. Group A, comprising 141 surveys, represents the native English speakers with native English-speaking parents or guardians. Group B, comprising 10 surveys, represents the native English speakers with one native and one nonnative English-speaking parent or guardian. Group C, comprising 17 surveys, represents the native English speakers with two nonnative English-speaking parents or guardians. Group D, also comprising 17 surveys, represents the nonnative English speakers.

### **Type 3 Results**

#### **Survey Results: Production**

In the production section of the survey, participants were asked to fill in blank spaces in 24 sentences, six of which addressed the Type 3 construction, with whatever they thought was missing from the sentence, if anything. The responses were coded for eight categories, which were condensed to four in the data presented in Appendix B. Of the eight categories, however, only two are analyzed in this chapter: All survey

production percentages in this chapter were calculated based solely on the number of participants who answered with either the standard *had* auxiliary (which included one case of 'd) or the target variant *would have* (which included the forms *would of*, *would've*, and *woulda* as variations of *would have* in both the survey and corpus data). All responses not using a version of *had* or *would have* were excluded, which caused differences in the number of responses reported for sentence-initial and sentence-final protases.

For the purpose of this study, the Standard category in both the survey and corpus data excluded all auxiliary verbs other than *had*. This excluded the Standard English forms *could have* and *might have*, which are defined as Alt. Standard in Appendix B, along with three instances of passive voice in the sentence *She would have tolerated their games if they were/had been played fair*. Other excluded forms were temporally mixed constructions such as *I would have been on time if they ever plowed the roads*. For a breakdown of the distribution of prescriptive, variant, mixed-construction, and nonstandard responses in the two constructions analyzed for this project, see Appendix B.

The number of relevant responses for the standard form and for the variant form is listed for each group, along with the percentage of the total standard and variant responses. Table 7 presents the standard and variant Type 3 results of the production section of the survey, sorted by participant demographic and by clause order.

Table 7

*Standard and Variant Survey Production Responses, Type 3*

Category	Group A (%)		Group B (%)		Group C (%)		Group D (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Initial Protasis	286 (73)	107 (27)	18 (75)	6 (25)	34 (76)	11 (24)	28 (70)	12 (30)	366 (73)	136 (27)
Final Protasis	288 (81)	66 (19)	16 (84)	3 (16)	33 (80)	8 (20)	29 (88)	4 (12)	363 (82)	81 (18)
Total Protasis	574 (77)	173 (23)	34 (79)	9 (21)	67 (78)	19 (22)	60 (79)	16 (21)	729 (77)	217 (23)

It is clear that the standard Type 3 conditional is preferred; however, the use of the variant, which on average appears in 23% of the analyzed responses, is an indication that the variant form is worthy of note. Although most of the groups were small, demographic variables did not heavily influence the distribution of standard and variant forms in the Type 3 production responses. Overall, the variant form comprised almost one-third as many responses as the standard form (nearly 25% compared to slightly over 75%).

**Effect of clause order.**

Overall, the participants showed a greater tendency to use the variant construction in the initial protasis, with variant responses comprising 27% of the standard and variant responses in the questions with initial protases and 18% of the standard and variant responses in those with final protases. This preference was highly significant ( $p = .000$ ). Given that initial protases are more common in Type 3 constructions (Biber et al., 1999), the effect of clause order acting in the favor of the variant form in initial protases may indicate that the variant form is likely to remain in the language.

## Survey Results: Judgment

Participants were asked to assess the underlined verb form for grammaticality in 15 sentences. The sentences in the judgment section of the survey included nine varieties: (1) Standard Type 3 with a pronoun subject, (2) Standard Type 3 with a noun subject, (3) Variant Type 3 with a pronoun subject, (4) Variant Type 3 with a noun subject, (5) Standard PCWCC with *that* complementizer, (6) Standard PCWCC without *that* complementizer, (7) Variant PCWCC with *that* complementizer, (8) Variant PCWCC without *that* complementizer, and (9) PCWCC with a nonstandard past participle. The standard Type 3 construction was represented by two sentences (one per subject type), and the variant Type 3 construction was represented by three sentences. However, one of the two pronoun-subject sentences in the Variant Type 3 construction included an indefinite pronoun, so it was excluded from the analysis. Table 8 presents the number of participants who described the standard and variant Type 3 results as “commonplace/normal,” divided into subject type and participant demographics. (For a summary of all participant responses to the judgment section, see Appendix C.)

Table 8

*Standard and Variant Survey Responses, Judgment as Commonplace/Normal, Type 3*

Category	Group A (%)		Group B (%)		Group C (%)		Group D (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Pronoun Subject	95 (53)	85 (47)	5 (50)	5 (50)	10 (45)	12 (55)	10 (53)	9 (47)	120 (52)	111 (48)
Noun Subject	97 (58)	71 (42)	5 (56)	4 (44)	12 (55)	10 (45)	8 (53)	7 (47)	122 (57)	92 (43)
Subject Total	192 (55)	156 (45)	10 (53)	9 (47)	22 (50)	22 (50)	18 (53)	16 (47)	242 (54)	203 (46)



Overall, the students considered the standard form slightly more normal than the variant form, with the standard form receiving 54% of the “commonplace/normal” labels and the variant form receiving the remaining 46%. The results were quite close between the standard and variant forms in sentences with pronoun subjects, which showed only a 4% difference in “commonplace/normal” responses between standard and variant (52% and 48%, respectively). The presence of a noun subject resulted in a wider discrepancy between the assessments of standard and variant forms, creating a 14% difference in acceptance of standard and variant (57% and 43%, respectively). These results indicated that the variant form is widely accepted in the protasis regardless of subject type, but the subject type may have an influence on participant judgment.

Overall, there was no substantial difference in distribution between the demographics, indicating that the variant form is widely accepted in the Type 3 protasis. Further evidence for this acceptance is that the Group C participants actually considered the variant form more normal than the standard form in the Type 3 constructions with an initial protasis (55% and 45%, respectively), thus showing an even stronger acceptance of the variant form in that category than average.

### **Corpus Results**

In the corpus results, the effects of genre (academic or spoken), clausal order, subject noun phrase type (pronoun or nominal subject), and change over time were examined. The three periods under analysis were 1990-1994 (Time 1), 2000-2004 (Time 2), and 2010-2015 (Time 3). Table 9 shows the number of standard and variant tokens for each variable, along with a corresponding percentage.

Table 9

*Academic Type 3 Constructions in Corpus Data*

Category	Time 1 (%)		Time 2 (%)		Time 3 (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Initial Protasis	61 (98.4)	1 (1.6)	59 (98.3)	1 (1.6)	50 (100)	0 (0)	170 (98.8)	2 (1.2)
Final Protasis	39 (97.5)	1 (2.5)	23 (85.2)	4 (14.8)	23 (92)	2 (8)	85 (92.4)	7 (7.6)
Pronoun Subject	45 (97.8)	1 (2.2)	37 (92.5)	3 (7.5)	35 (97.2)	1 (2.8)	117 (96.7)	5 (3.3)
Nominal Subject	55 (98.2)	1 (1.8)	45 (95.7)	2 (4.3)	38 (97.4)	1 (2.6)	138 (97.2)	4 (2.8)
Construction Total	100 (98.0)	2 (2.0)	82 (94.3)	5 (5.7)	73 (97.3)	2 (2.7)	255 (97.0)	9 (3.0)

Overall, the variant form was present in 3% of the academic corpus results. In the academic results, the variant form was the most frequent in Time 2 (2000-2004), with over twice the frequency of variant forms appearing in that time period as in the others (5.7% compared to 2-2.7%).

The corpus data served as a comparative check for the Type 3 survey data for each of the first three research questions (overall prevalence, effect of clausal order, and effect of noun type). Overall, the variant form was far less prevalent in the Type 3 academic corpus data (3%) than in the survey production responses (23%) or in the judgment (46%). The distribution of the variant form between initial and final protases in the academic corpus results also contrasts with that of the survey production data: In the academic corpus data, most of the variant forms appear in the constructions with final protases (8% compared to 1% of initial protases), whereas the survey participants

consistently produced a higher percentage of variant forms in sentences with initial protases (27% compared to 18% of final protases). However, on the question of subject-type influence, the survey judgment data correlated with the academic corpus data, as the latter showed a higher percentage of variant forms in constructions with pronoun subjects (3.3% instead of 2.8% with noun subjects), and as discussed above, the respondents were more likely to consider variant forms normal in sentences with pronoun subjects (48% compared to 43% with noun subjects). This pattern is also reflected in the corpus data from the spoken genre, presented in Table 10.

Table 10

*Spoken Type 3 Constructions in Corpus Data*

Category	Time 1 (%)		Time 2 (%)		Time 3 (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Initial Protasis	241 (84.0)	46 (16.0)	198 (98.0)	35 (2.0)	189 (83.5)	38 (16.5)	628 (87.8)	118 (12.2)
Final Protasis	85 (89.5)	10 (10.5)	79 (95.2)	4 (4.8)	252 (97.7)	6 (2.3)	215 (91.5)	20 (8.5)
Pronoun Subject	205 (81.7)	46 (18.3)	188 (85.8)	31 (14.2)	177 (82.3)	38 (17.7)	570 (83.2)	115 (16.8)
Nominal Subject	121 (93.1)	9 (6.9)	89 (91.8)	8 (8.2)	67 (91.8)	6 (8.2)	277 (92.3)	23 (7.7)
Construction Total	326 (85)	56 (15)	277 (87.7)	39 (12.3)	244 (84.7)	44 (15.3)	847 (86.0)	138 (14.0)

Overall, the variant form was present in 14% of the spoken corpus results, making it far more substantial in the spoken results than in the academic results. In the spoken results, the variant form appeared in the highest percentage of results in Time 3 (2010-2015), with 15.3% representation, though Time 1 also contained 15% representation of

variant forms, indicating that the prevalence of the variant form is not new.

The spoken corpus data also served as a comparative check for the Type 3 survey data for each of the first three research questions (overall prevalence, effect of clausal order, and effect of noun type). Overall, the variant form was much less prevalent in the Type 3 spoken corpus data (14%) than in the survey production responses (23%) or in the judgment (46%).

A surprising number of corpus results did not contain the prototypical Type 3 construction. Numerous corpus results contained *could have*, *might have*, *should have*, and even *may have* in the apodosis. There were also many instances of mixed conditionals. These results were not counted in the final tally, but they are worthy of investigation in future studies.

#### **Effect of genre.**

In the Type 3 corpus data, the presence of the variant form was more frequent in the spoken genre than it was in the academic genre, appearing in 14% of spoken Type 3 constructions and 3% of academic Type 3 constructions. The effect of genre on the presence of the variant construction was found to be significant ( $p = .000$ ). These results indicate that the form is more prevalent in the spoken mode. Although several of the ESOL textbooks claimed that this form was used in “colloquial” or “informal settings,” these descriptors could be improved. Because most of the data came from television interviews, they would not be as informal as if they had come from ordinary conversations.

### Effect of clause order.

The distribution of the variant form between initial and final protases in the spoken corpus results is the opposite of the academic corpus results: In the spoken corpus data, more variant forms appeared in the constructions with initial protases (12.2% instead of 8.5% of final protases). Thus, the spoken corpus data and the survey data show the same pattern.

Due to the quantity of spoken data, the tendencies present in the spoken corpus data are representative of the combined spoken and academic results, with some adjustments for percentages. Table 11 shows the distribution of the standard and variant forms among Type 3 constructions with initial and final protases.

Table 11

*Distribution of Standard and Variant Forms, Final and Initial Protases, Type 3 Corpus*

Type	Standard	Variant	Total	% Variant
Initial Protasis	802	128	930	13.76
Final Protasis	300	19	319	5.96
Total	1102	147	1249	11.77
% Initial	72.78	87.07	74.46	

Overall, the data present a clear answer to the effect of clause order. Though the academic corpus data featured the variant form almost exclusively in final protases (7 cases and 8% of final protases as opposed to 2 cases and 1% of initial protases), the combined corpus data and the survey production data showed that the variant form was more likely to appear in an initial protasis (corpus: 14% versus 6%, survey: 27% versus 18%). Furthermore, the protasis order in the variant versus the standard Type 3 construction in the corpus data was significant in a Pearson chi-square test ( $p = .001$ ),

with an initial protasis appearing in 87% of all Type 3 variant constructions (spoken and academic combined) and in 73% of all Type 3 standard constructions.

### **Effect of noun phrase type.**

The spoken corpus data showed an even stronger preference for variant forms in sentences with pronoun subjects (17% compared to 8% with noun subjects, as shown in Table 12). These results correlated with the survey judgment data regarding subject type, which showed a higher percentage of variant forms considered normal in constructions with pronoun subjects (48%) than with noun subjects (43%).

Overall, the corpus data indicated that the variant form was more likely to appear in Type 3 constructions with pronoun subjects (15%) than with noun subjects (6%), as shown in Table 12.

Table 12

*Distribution of Standard and Variant Forms, Noun and Pronoun Subjects, Type 3 Corpus*

Type	Standard	Variant	Total	% Variant
Noun Subject	405	27	432	6.25
Pronoun Subject	697	120	817	14.69
Total	1102	147	1249	11.77
% Pronoun	63.25	81.63	74.46	

These results correlated with participants' higher rate of acceptance of the variant form in constructions with pronoun subjects in the protasis. The type of subject noun phrase in the variant versus the standard Type 3 construction was significant in a Pearson chi-square test ( $p = .000$ ), with pronoun subjects appearing in 82% of variant constructions and in 63% of standard constructions. These results indicate that ESOL materials should make note of the variant form's particular prevalence in protases with

pronoun subjects.

### **Change over time.**

The academic and spoken corpus data showed opposing trends in the percentage of variant constructions present. In the academic data, the variant form was the most frequent during Time 2. However, the spoken data conversely showed the lowest frequency of variant form Time 2, and the quantity of spoken data vastly outweighed the academic data. Thus, overall, there was a slight decrease in percentage of the variant Type 3 construction between Time 1 and Time 2 before returning to the first ratio in Time 3 (Time 1 = 11.8%, Time 2 = 11.0%, Time 3 = 11.8%). The effect of change over time was not found to be significant when comparing the variant-to-standard ratio for each time period ( $p = .744$ ), indicating that the prevalence of the form has neither increased nor decreased significantly over time among the corpus sources. However, a broader sampling may be necessary for more conclusive results.

## **PCWCC Results**

### **Survey Results: Production**

Participants were asked to fill in blank spaces in 24 sentences, twelve of which addressed the PCWCC construction, with whatever they thought was missing from the sentence, if anything. In the Variant category, the forms *would of* and *woulda* were counted as variations of *would have*. The Standard category indicated the use of *had* as the auxiliary form; all instances of *could have* were excluded. Mixed-construction and nonstandard responses were also excluded from this analysis. (For a breakdown of the distribution of prescriptive, variant, mixed-construction, and nonstandard responses in the

two constructions analyzed for this project, see Appendix B.) Most of the excluded responses appeared in the PCWCCs with noun subjects, which merits further investigation in future studies. In each demographic, the strongest effect was seen in the last construction in the list (PCWCC, N, *that*), and part of this effect may have been created by question placement, as these sentences followed the distractor sentences.

The PCWCC results of the production section of the survey were as shown in Table 13, which analyzes the distribution of standard and variant results by demographic, by presence of the *that* complementizer, and by subject type.

Table 13

*Standard and Variant Survey Production Responses, PCWCC*

	Group A (%)		Group B (%)		Group C (%)		Group D (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Influence of <i>that</i>	399 (58)	287 (42)	20 (49)	21 (51)	49 (68)	23 (32)	31 (51)	30 (49)	497 (58)	361 (42)
Absence of <i>that</i>	529 (72)	206 (28)	30 (65)	16 (35)	70 (84)	13 (16)	53 (75)	18 (25)	679 (73)	253 (27)
Pronoun Subject	511 (68)	239 (32)	29 (60)	19 (40)	66 (80)	17 (20)	52 (71)	21 (29)	655 (69)	296 (31)
Noun Subject	417 (62)	254 (38)	21 (54)	18 (46)	53 (74)	19 (26)	32 (54)	27 (46)	521 (62)	318 (38)
PCWCC Total	928 (65)	493 (35)	50 (57)	37 (43)	119 (77)	36 (23)	84 (64)	48 (36)	1176 (66)	614 (34)

Overall results showed a two-thirds/one-third split in standard and variant responses (66% and 34%, respectively), indicating that the variant form is much more prevalent in the PCWCC construction than in the Type 3 construction (which had a



distribution of 77% and 23%, respectively). Some demographic variation was present: Group B was closer to an equal partition (57% and 43%, respectively), while Group C showed a stronger preference for the standard form (77% and 23%, respectively, just like the Type 3 results). Nevertheless, each demographic showed similar patterns of distribution when controlled for the variables of *that* complementizer and subject type.

### **Effect of *that* complementizer presence.**

The variant form was substantially more prevalent in the PCWCCs with a *that* complementizer (42% versus 27% without *that*). The effect of the *that* complementizer was contrary to researcher expectations: Because the retention of *that* is often considered more common in academic writing (Biber et al., 1999; Huddleston & Pullum, 2002), it was expected that sentences with *that* would be more likely to elicit the prescriptive form, but results indicated otherwise. One contributor to these results is that the PCWCC sentences that contained a noun subject and *that* (PCWCC, N, *that*) followed the distractor sentences and thus received a higher number of unusual or ungrammatical responses rather than standard or variant ones, possibly due to participant inattentiveness. However, the PCWCCs with a pronoun subject and *that* (PCWCC, Pro, *that*) also contained fewer prescriptive responses than PCWCCs without *that*, and the presence of *that* resulted in a higher percentage of variant forms to a significant degree both in constructions with noun subjects ( $p = .000$ ) and in constructions with pronoun subjects ( $p = .000$ ). Thus, these unexpected results cannot be attributed solely to question placement. The survey results indicate that the variant form is becoming prevalent even in traditionally academic structures.

### **Effect of noun phrase type.**

Each of the demographics showed the same overall result: The variant form was more prominent in the PCWCCs with a noun subject. The overall survey data showed that the presence of a noun subject in the complement clause resulted in more variant forms (38%) than the presence of a pronoun subject (31%). This phenomenon was not according to researcher expectations, nor did it correlate with the corpus findings discussed later. One contributor to these results is that the PCWCC sentences that contained a noun subject and *that* (PCWCC, N, *that*) followed the distractor sentences and thus received a higher number of unusual or ungrammatical responses, possibly due to participant inattentiveness. However, the higher rate of variant responses in PCWCCs with noun subjects was significant both in constructions with *that* ( $p = .000$ ) and in constructions without *that* ( $p = .000$ ), indicating that this pattern is not merely due to survey question placement.

### **Survey Results: Judgment**

The sentences in the judgment section of the survey included nine varieties: (1) Standard Type 3 with a pronoun subject, (2) Standard Type 3 with a noun subject, (3) Variant Type 3 with a pronoun subject, (4) Variant Type 3 with a noun subject, (5) Standard PCWCC with *that* complementizer, (6) Standard PCWCC without *that* complementizer, (7) Variant PCWCC with *that* complementizer, (8) Variant PCWCC without *that* complementizer, and (9) PCWCC with a nonstandard past participle. Each of the PCWCC varieties was represented by two sentences. The results of the standard and variant PCWCCs with and without *that* are presented in Table 14; the sentences with

nonstandard participles were excluded from the analysis.

Table 14

*Standard and Variant Survey Responses, Judgment as Commonplace/Normal, PCWCC*

Category	Group A (%)		Group B (%)		Group C (%)		Group D (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Influence of <i>that</i>	186 (52)	173 (48)	9 (45)	11 (55)	18 (56)	14 (44)	14 (52)	13 (48)	227 (52)	211 (48)
Absence of <i>that</i>	193 (55)	161 (45)	9 (47)	10 (53)	18 (47)	20 (53)	16 (52)	15 (48)	236 (53)	206 (47)
PCWCC total	379 (53)	334 (47)	18 (46)	21 (54)	36 (51)	34 (49)	30 (52)	28 (48)	463 (53)	417 (47)

Overall, the variant form was considered nearly as normal as the standard form (47% and 53%, respectively). The results showed a similar distribution of standard and variant forms across the demographics and sentence types. There was a slight preference for the standard form in all categories and in all groups except Group B, which preferred the variant form in both categories (55% of sentences with *that* and 53% of sentences without *that*), and Group C, which preferred the variant form for sentences without *that* (53%).

#### **Effect of *that* complementizer presence.**

Participants were infinitesimally more likely to categorize the PCWCC without *that* as normal, but only by a margin of two responses. In this instance, demographics played an interesting role: Participants with at least one native English-speaking parent (Groups A and B) considered PCWCCs with *that* more normal, but participants with nonnative parents (Groups C and D) considered sentences without *that* more normal. However, the standard and variant responses were closely divided throughout the table.

### Effect of noun phrase type.

Due to an editing error on the judgment section of the survey, not all of the PCWCC sentences could be analyzed for pronoun versus noun subject, but a subject-type analysis was conducted on the four PCWCC judgment sentences with *that*, allowing an exploration of the topic, as shown in Table 15.

Table 15

*Standard and Variant Survey Responses, Commonplace/Normal, PCWCC with that*

Category	Group A (%)		Group B (%)		Group C (%)		Group D (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Pronoun subject	92 (48)	99 (52)	3 (33)	6 (67)	9 (56)	7 (44)	7 (50)	7 (50)	111 (48)	119 (52)
Noun subject	94 (56)	74 (44)	6 (55)	5 (45)	9 (56)	7 (44)	7 (54)	6 (46)	116 (56)	92 (44)
PCWCC w/ <i>that</i> , Total	186 (52)	173 (48)	9 (45)	11 (55)	18 (56)	14 (44)	14 (52)	13 (48)	227 (52)	211 (48)

Among the PCWCCs with a *that* complementizer, the standard form was considered slightly more normal overall (52%), though not by a wide margin. When divided into subject types, the standard form was considered more normal overall in clauses with a noun subject (56%), and the variant form was considered more normal overall in clauses with a pronoun subject (52%). Group B showed the strongest preference for the variant form, specifically in the pronoun subject, with 67% of the “commonplace/normal” judgments assigned to the variant form in the sentences with pronoun subjects in that group. Thus, the participants’ judgment of forms contradicts their production.

## Corpus Results

In the analysis of the PCWCC corpus data, the effects of genre (academic or spoken), presence of *that* complementizer, subject noun phrase type (pronoun or nominal subject), and change over time were examined. The three periods under analysis were 1990-1994 (Time 1), 2000-2004 (Time 2), and 2010-2015 (Time 3). Table 16 presents the academic corpus results and shows the number of standard and variant tokens for each variable, along with a corresponding percentage.

Table 16

### *Academic PCWCC Constructions in Corpus Data*

Category	Time 1 (%)		Time 2 (%)		Time 3 (%)		Total (%)	
	Stand.	Var.	Stand.	Var.	Stand.	Var.	Stand.	Var.
Influence of <i>that</i>	3 (100)	0 (0)	1 (100)	0 (0)	23 (100)	0 (0)	27 (100)	0 (0)
Absence of <i>that</i>	11 (92)	1 (8)	4 (66)	2 (33)	3 (75)	1 (25)	18 (82)	4 (18)
Pronoun subject	7 (88)	1 (12)	4 (66)	2 (33)	3 (75)	1 (25)	14 (78)	4 (22)
Nominal subject	7 (100)	0 (0)	1 (100)	0 (0)	23 (100)	0 (0)	31 (100)	0 (0)
Construction, total	14 (93)	1 (7)	5 (71)	2 (29)	26 (96)	1 (4)	45 (92)	4 (8)

The academic PCWCC corpus results were sparse; thus, any possible extrapolations from the data must be confirmed through future study. In the academic PCWCC results, the variant form appeared in 8% of the overall results. It occurred most frequently in Time 2 (2000-2004), as was the case for the academic Type 3 corpus results. Also notable was that the variant form appeared in twice as many constructions in

the second period (29% of the Time 2 results), despite the fact that the number of PCWCC constructions strongly decreased in that period. These results confirm that the increase and subsequent decline in academic usage of the variant form occurred in both constructions within the corpus data. However, further generalization may not be possible. Additional time spans and more data need to be taken into account to see whether a pattern becomes more discernible.

In the academic corpus results, the distribution of the variant form between PCWCCs with and without the *that* complementizer contrasts with that of the survey production and judgment data: All of the variant forms in the academic corpus data appear in the constructions without *that*, comprising 18% of the academic PCWCC data without *that*, whereas the survey showed that variant forms were both produced (42% versus 27%) and deemed normal (48% versus 47%) more frequently in sentences with the *that* complementizer than in those without. This disparity in results could indicate either an insufficient sample size in the corpus data, an issue of survey question placement, or a recent change in usage; regardless of its source, it is worthy of further investigation.

The academic corpus data also contrasted with the survey production data in terms of subject-type distribution: The corpus data showed variant forms only in constructions with pronoun subjects (18% of academic PCWCCs with pronouns), but the participants produced more variant forms in sentences with noun subjects (38% of nouns versus 31% of pronouns). However, the participants were more likely to judge the variant form as normal in sentences with pronoun subjects (52% versus 44%), which does

correspond with the academic corpus results. Again, this disparity could be attributed to a variety of sources, and it merits further investigation.

The spoken corpus results, presented in Table 17, did not align with the academic corpus results; in fact, the appearance of the variant showed the opposite pattern over time.

Table 17

*Spoken PCWCC Constructions in Corpus Data*

Category	Time 1 (%)		Time 2 (%)		Time 3 (%)		Total (%)	
	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>	<u>Stand.</u>	<u>Var.</u>
Influence of <i>that</i>	6 (67)	3 (33)	12 (86)	2 (14)	8 (89)	1 (11)	26 (81)	6 (19)
Absence of <i>that</i>	43 (77)	13 (23)	52 (81)	12 (19)	51 (66)	26 (34)	146 (74)	51 (26)
Pronoun subject	37 (73)	14 (27)	51 (80)	13 (20)	52 (71)	21 (29)	140 (74)	48 (26)
Nominal subject	12 (86)	2 (14)	13 (93)	1 (7)	7 (54)	6 (46)	32 (78)	9 (22)
Construction, total	49 (75)	16 (25)	64 (82)	14 (18)	59 (69)	27 (31)	172 (75)	57 (25)

In the spoken results, the variant form was the most frequent in Time 3 (31%) and the least frequent in Time 2 (18%), indicating that the variant form may be experiencing a renaissance and could become even more frequent. This fluctuation was especially apparent among PCWCC constructions with noun phrases, in which the variant percentage started at 14% in Time 1, decreased to 7% in Time 2, and then shot up to 46% in Time 3. However, more time spans should be included in future studies to see whether usage fluctuates or steadily increases.

### **Effect of genre.**

In the PCWCC corpus data, the presence of the variant form was far more frequent in the spoken genre (25%) than it was in the academic genre (8%). This result correlated with the lower rate of variant forms in academic Type 3 data and was according to expectations. The effect of genre on the presence of the variant construction was found to be significant ( $p = .004$ ). As with the Type 3 corpus data, these results indicate that the variant form is more common in the spoken mode. As was mentioned before, the descriptor of “informal setting” for the variant form could be improved. Because most of the data came from television interviews, they would not be as informal as if they had come from ordinary conversations.

### **Effect of *that* complementizer presence.**

The distribution of the variant form between PCWCCs with and without the *that* complementizer in the spoken corpus results contrasts with that of the survey production and judgment data, just as the academic corpus data did. In the spoken corpus data, a higher percentage of variant forms appears in the constructions without *that* (26% instead of 19% with *that*), whereas the survey showed that a higher percentage of variant forms were produced (42%) and subsequently deemed normal (48%) in sentences with the *that* complementizer.

Due to the quantity of spoken data, the tendencies present in the spoken corpus data are representative of the combined results, with some adjustments for percentages. Table 18 presents the distribution of the variant form and the *that* complementizer in the combined corpus data.



Table 18

*Distribution of Standard and Variant Forms, with and without that, PCWCC Corpus*

Type	Standard	Variant	Total	% Variant
With <i>that</i> complementizer	33	6	39	15.38
No <i>that</i> complementizer	184	55	239	23.01
Total	217	61	278	21.94
% complementizer	15.21	9.84	14.03	

As illustrated in Table 20, the *that* complementizer was present in 10% of all corpus PCWCC variant constructions and in 15% of all corpus PCWCC standard constructions. Viewed another way, the variant form was present in 15% of all PCWCC constructions with *that* and 23% of all corpus PCWCC constructions without *that*. From either perspective, the corpus data indicates that the variant form is more strongly correlated with constructions without *that*. However, partially due to the smaller sample size of the PCWCC standard and variant constructions, statistical significance was not established for the influence of the *that* complementizer ( $p = .268$ ). These results indicate that the influence of the *that* complementizer may be complex and requires further study.

#### **Effect of noun phrase type.**

The spoken corpus data also showed that the variant form was more likely to appear in PCWCC constructions with pronoun subjects (26% instead of 22% with noun subjects), a result that also contrasts with the results of the survey, in which the participants produced more variant forms in sentences with noun subjects (38% versus 31% of pronoun subjects). However, the participants were more likely to judge the variant form as normal in sentences with pronoun subjects (52% versus 44% of noun subjects), which corresponds with the spoken corpus results. Nevertheless, the spoken

Time 3 data showed a higher percentage of variant forms in PCWCC sentences with noun subjects (46%) than with pronoun subjects (29%). This discrepancy is worth further analysis in future studies.

Due to the quantity of spoken data, the tendencies present in the spoken corpus data are representative of the combined results, with some adjustments for percentages. Table 19 presents the distribution of the variant form and subject types in the combined corpus data.

Table 19

*Distribution of Standard and Variant Forms, Noun and Pronoun Subjects, PCWCC Corpus*

Type	Standard	Variant	Total	% Variant
Noun Subj.	43	9	52	17.31
Pronoun Subj.	174	52	226	23.01
Total	217	61	278	21.94
% Pronoun	80.18	85.25	81.29	

As illustrated in Table 21, pronoun subjects were present in 85% of all corpus variant constructions and in 80% of all corpus standard constructions. Viewed another way, the variant form comprised 17% of all corpus PCWCC constructions with noun subjects and 23% of all corpus PCWCC constructions with pronoun subjects. From either perspective, the corpus data indicates that the variant form is more strongly correlated with constructions with pronoun subjects. However, partially due to the smaller sample size of the PCWCC standard and variant constructions, statistical significance was not established for the type of subject noun phrase ( $p = .345$ ). While these results do not confirm a strong correlation between the variant form and pronoun subjects, they do indicate that pronoun subjects are more prevalent in the PCWCC construction, which

means that any future discoveries about the influence of pronouns on the variant form would be highly relevant to the construction as a whole.

### **Change over time.**

Similar to the variant Type 3 construction, the variant PCWCC construction showed signs of fading slightly overall in Time 2 (Time 1 = 21%, Time 2 = 19%) and then growing stronger in Time 3 (25%). The Academic results showed the opposite trend (Time 1 = 7%, Time 2 = 29%, Time 3 = 4%) but were too small to counter the Spoken trend (Time 1 = 25%, Time 2 = 18%, Time 3 = 31%). Due to the smaller sample size of the PCWCC standard and variant constructions and the conflict between genres, statistical significance was not established for the change over time ( $p = .690$ ). However, the use of the variant form in the PCWCC construction should continue to be observed, as patterns may become clearer with additional longevity of data.

Some of the corpus results were surprising. In the PCWCC construction, one result included a speaker's self-correction from the prescriptive form to the variant form, and one result showed the variant form *had of* + past participle. These results are worthy of investigation in future studies.

## **Summative Results and Discussion**

This study sought to establish the significance of the variant form in the Type 3 protasis and in the PCWCC. Additional factors were examined: In the Type 3 construction, the variables of participant demographic, clausal order, subject type (noun or pronoun), corpus genre, and change over time were explored. In the PCWCC construction, the variables of participant demographic, presence of *that* complementizer,

subject type (noun or pronoun), corpus genre, and change over time were explored. For clarity, a recap of the results is provided here.

In the Type 3 construction, the variant form appeared in 23% of the analyzed survey production data and 12% of the corpus data, and it received 46% of the “normal/commonplace” labels among the standard and variant Type 3 constructions. The variant was more common in the spoken genre of the corpus data. It appeared more frequently and was judged to be more normal in initial protases than in final protases. The variant was also more common, and was judged to be more common, in protases with pronoun subjects. Over time, the variant form showed a slight decrease in frequency followed by a slight increase in frequency to above the original rate; the change was not found to be significant.

In the PCWCC construction, the variant form appeared in 34% of the analyzed survey production data and 22% of the corpus data, and it received 47% of the “normal/commonplace” labels among the standard and variant PCWCC constructions. The variant was more common in the spoken genre of the corpus data. In the survey, it appeared more frequently and was judged to be more normal in clauses with *that* than in clauses without *that*, but the corpus data (both genres) showed the opposite trend. The variant was also more commonly produced in the survey, and was judged to be more common, in complement clauses with noun subjects. Once again, the corpus data showed the opposite trend, with the exception of the Time 3 spoken results. Over time, the variant form showed a decrease in frequency followed by an increase in frequency that rose above the starting point; the change was not found to be significant.

On the whole, the PCWCC data proved to have a higher ratio of variant forms than the Type 3 data, both in the corpus and in the survey responses. These results correspond with the findings of Ishihara (2003). However, the PCWCC data also proved to be more volatile, indicating the need for further study.

## CHAPTER V

### CONCLUSION

This study was originally inspired by personal observation. However, a review of the literature showed that not only was this topic under current investigation and in need of further study (Hancock, 1993; Ishihara, 2003), but also many aspects of conditionals were being explored, from their logical implications (Ippolito, 2013) to the limitations of their Type categorization system in ESOL materials (Fulcher, 1991; Maule, 1988, *inter alia*). Also under examination was the stability of counterfactual forms in English (Molencki, 1998, 1999, 2000; McFadden and Alexiadou, 2006). The shifting forms in the counterfactual conditional show a pattern of the verb form in the protasis becoming parallel with that of the apodosis, followed by the verb in the apodosis developing a new form or marker to distinguish itself from that of the protasis. The current variation is claimed to be a manifestation of the verb form in the protasis attempting to become parallel with the one in the apodosis once again (Molencki, 2000). Because the Type 3 and PCWCC forms are related forms (Hancock, 1993; Larsen-Freeman and Celce-Murcia, 2016; Murphy, 2012, *inter alia*), changes to the protasis affect the PCWCC verb form as well, resulting in the two constructions being examined in parallel in this study, as seen in Ishihara (2003). To study the prevalence of the variant *would have* phenomenon, corpus and survey data were collected and analyzed to answer ten research questions, for which the answers will be summarized in the following section.

## Answers to Research Questions

The first question in this study sought to determine how prevalent the *would have* + past participle form was in the Type 3 protasis in written academic English and spoken English. Nearly one-fourth of participant responses contained *would have* + past participle in the protasis of the Type 3 construction in the written survey, and only a handful of the 185 surveys contained no instances of *would have*, indicating that the usage is prevalent. Further evidence of this prevalence can be seen in the participants' assessment of Type 3 sentences with *would have*: The participants considered the standard form closer to normal than the variant form, but over half of the variant forms were also marked as normal. Though the academic corpus data did not reflect a high percentage of variant forms, the spoken corpus data showed a strong minority of variant forms as well. The results of this study indicated that the variant form is becoming sufficiently prevalent that ESOL materials should directly address it not just in a footnote, but as a frequent colloquial form, particularly in oral communication materials.

The second question explored in this study was whether the order of protasis and apodosis influenced the participants' choice of auxiliary verb. Overall results showed that sentences with initial protases were more likely to contain the variant form. These results, combined with the knowledge that initial protases are more common, indicate that ESOL students should be made aware of the variant form.

The third question addressed in this study was whether the use of pronoun or noun subjects affected the frequency of the variant Type 3 construction. According to the survey judgment data and the corpus data, the presence of a pronoun subject correlated

with higher rates of variant forms. Since sentences with pronoun subjects are quite numerous in real-world production, these results indicate that the form is not limited to unusual settings and thus is relevant to ESOL students.

The fourth question investigated in this study was whether 18- to 25-year-old participants of different dialect/language backgrounds would produce and accept the form *would have* + past participle in the Type 3 construction when completing a written survey. The production results were surprisingly consistent across demographics, as were the judgment results. In the latter, the native speakers with two native-speaking parents showed the strongest distinction between standard and variant forms, while the native speakers with two nonnative-speaking parents showed almost no distinction. However, none of the groups showed a particularly strong distinction in acceptability between the two forms, indicating that these results are relatively stable across demographics.

The fifth research question investigated the change over time in frequency of the variant form in the Type 3 construction. The academic corpus results showed that the variant form became more frequent in the second period of time before decreasing to initial levels in the third period of time, but the spoken corpus results showed the opposite pattern. Due to the much higher frequency of spoken than academic Type 3 constructions, the overall results correlated with the spoken results, showing a slight decrease in frequency of the variant form before returning to a frequency slightly above the initial frequency.

The sixth research question in this study, similar to the first, explored how prevalent the use of *would have* + past participle was in the PCWCC in written academic



English and spoken English. Over one third of participant responses contained *would have* + past participle in the protasis of the PCWCC construction in the written survey, and only a handful of the 185 surveys contained no instances of *would have*, indicating that the variant form has become quite prevalent. Further evidence of this prevalence can be seen in the participants' assessment of PCWCC sentences with *would have*: The participants considered the standard form only slightly closer to normal than the variant form. Though the academic corpus data did not reflect a high percentage of variant forms, the spoken corpus data contained nearly 25% variant forms, and 31% variant forms in the latest period of time. The results of this study indicated that the variant form is becoming quite prevalent in the PCWCC construction and should definitely be presented to ESOL students.

The seventh question sought to determine whether the presence of the *that* complementizer in the PCWCC construction influenced the participants' choice of auxiliary verb. The results addressing this question were mixed. The survey production results showed that sentences with *that* were more likely to contain the variant form. However, the judgment section of the survey showed that the participants considered PCWCCs with and without *that* to be largely equivalent, and the academic corpus data indicated that PCWCCs without *that* were the only category to contain the variant form. In answering this question and the next, the production results of the survey are under question due to the considerable number of nonstandard responses generated by the set of questions with a *that* complementizer and a noun subject; thus, additional research is called for on this topic.

As with the Type 3 construction, the use of pronoun or noun subjects in the PCWCC was analyzed to see if it affected the frequency of the variant PCWCC construction. The survey production results indicated that the variant form was more common in sentences with noun subjects. Intriguingly, the survey judgment results, which due to complications were limited to sentences with *that* complementizers, contradicted the production results. The corpus results also contradicted the production results; again, this question will require further study to answer more sufficiently due to unusual survey responses in questions affecting this category.

The ninth question investigated in this study was whether 18- to 25-year-old participants of different dialect/language backgrounds would produce and accept the form *would have* + past participle in the PCWCC construction when completing a written survey. The production results were fairly consistent between Groups A and D, showing results that were close to the overall average of two-thirds standard, one-third variant responses. Group B, however, was divided nearly evenly between standard and variant responses, and Group C was divided by more than three to one in favor of the standard form. However, the judgment results were fairly consistent in showing that the variant form was considered approximately as normal as the standard form. In the latter, the native speakers with two native-speaking parents showed the strongest overall preference for the standard form, while the native speakers with one nonnative-speaking parent showed the strongest preference for the variant form. However, none of the groups showed a particularly strong distinction in acceptability between the two forms, indicating that these results are relatively stable across demographics.

The final research question in this study, like the fifth, investigated the change over time in frequency of the variant form. The academic corpus results showed that the variant form became more frequent in the second period of time before decreasing to initial levels in the third period of time, but the spoken corpus results showed the opposite pattern. Due to the much higher frequency of spoken than academic PCWCC constructions, the overall results correlated with the spoken results, showing a slight decrease in frequency of the variant form before returning to a frequency slightly above the initial frequency. However, due to the small sample size of the PCWCC corpus data, further investigation is required before any generalizations can be made.

All thing considered, there were many interesting discoveries in the results of this project, including several that have implications for ESOL professionals and students. The findings of this study will be of use to researchers, teachers, and students interested in current usage patterns of English.

### **Factors Outside the Scope of This Study**

Just as important to the analysis as the questions that could be answered are the questions that could not be addressed in this study. For the sake of length and concision, the use of *could have* or *might have* in the protasis or PCWCC was excluded from analysis in this study, though the use of *could have* was particularly frequent. Also excluded from analysis was any type of mixed construction, whether factual such as *If he asked me yesterday, I would have said yes* or temporal such as *We wish the teacher cancelled class*. These constructions were fascinatingly frequent in the results and may indicate another area of development in counterfactual constructions. There were also

several interesting patterns of nonstandard responses in the surveys that merit further study; for example, several of the nonnative English-speaking participants showed signs of not knowing about the tense backshift phenomenon in English, and many of the native English speakers produced responses without tense backshifting specifically in the PCWCC constructions. All of these topics deserve attention in future studies.

### **Limitations of Current Study and Potential for Future Studies**

There were numerous limitations to a project of this size, many of which were regrettable but necessary. One limitation of this study was that the survey was limited in length. As a consequence, not all variables could be adequately addressed in each section, resulting in the variable of Type 3 protasis order being excluded from the judgment section and the variable of subject noun phrase being excluded from the Type 3 sentences in the production section. In addition, there was an error in noun phrase type in the judgment section (the wrong subject was changed to a noun in a sentence, leaving the other subject a pronoun), which required a reduced analysis of the noun phrase variable among the PCWCC sentences. Another restriction related to the subject type was that all of the PCWCC sentences in the production section used the same pronoun in both clauses (e.g., *She wishes she*, *They wish they*) to avoid introducing additional variables. These variables should be included in future analyses of this topic.

Another limitation to this project was one of researcher time: The corpus data analysis was conducted in fall 2017 and was concluded shortly before the 2016-2017 corpus update became available online; thus, the latest corpus data were not included in the study. Future researchers can address this shortcoming in their projects.

There were several demographic limitations to the survey responses: this study examined only responses from ENG 101 and 102 students, only responses from students from CWU, and only responses from students between the ages of 18 and 25. Due to response rates, the demographics were also limited to only students from the Western U.S. region, as there were insufficient data from other regions to compare U.S. regions or international perspectives. This study should be replicated with both younger and older participants to see what effect, if any, age has on participant responses. Future studies could also investigate the effect of educational background on participant responses. Finally, while this study has located or created evidence that the variant *would have* auxiliary is prevalent in Type 3 and PCWCC constructions in the Western U.S., including the Southwest (Garner, 2009), as well as the Midwest (Ishihara, 2003), no studies have focused on the eastern U.S. regions. It would be fascinating to replicate this study in a region with a more distinct regional dialect, such as in the Coastal South, in the Appalachians, or in a region of the Northeastern U.S., or perhaps in an English-speaking region outside of the U.S., such as in Canada or in the U.K.

### **Pedagogical Applications of This Study**

This study is pedagogically relevant on multiple levels. A review of the literature brings to light numerous ESOL professionals calling for the expansion of treatment on conditional constructions, indicating the need for more usage-based studies of this nature. Equally indicative of the need for more studies is a surprising lack of discussion of the PCWCC construction, despite its complexity and strongly represented variant form. Teachers preparing their ESOL students for American university studies or daily life in

the Western U.S. should be aware that the variant form investigated in this study is becoming frequently produced and widely accepted by both native and nonnative English speakers at a college level in the Western U.S., both in the Type 3 construction and in the PCWCC. These findings are also relevant to ESOL materials developers, such as textbook authors and developers of ESOL websites and other online materials, and authors or editors of grammar manuals and other reference materials. These content creators and regulators would be interested to know about the prevalence of variant *would have* in the two constructions analyzed for this study. The PCWCC in particular merits more attention in ESOL materials and grammar manuals, and this study shows that the variant form needs to be included in that discussion as well.

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## APPENDIXES

### APPENDIX A

#### Survey

**Focused Language Survey**

**Part I: Please fill in the blanks below with the words that first come to mind. Please do not change your answers.**

a. I wish I \_\_\_\_\_ known the answer.

b. If he \_\_\_\_\_ asked me yesterday, I would have said yes.

c. We wish his team \_\_\_\_\_ won the championship.

d. I would have been on time if they \_\_\_\_\_ plowed the roads.

e. He wishes that we \_\_\_\_\_ written our papers more carefully.

f. If anyone knew the answer, they \_\_\_\_\_ say so.

g. He \_\_\_\_\_ mail his ballot if he could find it.

h. She wishes that her classmates \_\_\_\_\_ listened to her.

i. They wish they \_\_\_\_\_ left on Friday.

j. If we \_\_\_\_\_ gone to the gym this morning, we would have seen Ana.

k. I wish the store \_\_\_\_\_ been open at midnight.

l. She would have tolerated their games if they \_\_\_\_\_ played fair.

m. I wish that you \_\_\_\_\_ said something sooner.

n. If we could fly, we \_\_\_\_\_ travel to other countries.

o. They \_\_\_\_\_ visit Paris if they had the opportunity.

p. He wishes that yesterday's assignment \_\_\_\_\_ improved his grade.

q. She wishes she \_\_\_\_\_ taken another course.

r. If they \_\_\_\_\_ arrived on time, they would have heard the news.

s. We wish the teacher \_\_\_\_\_ cancelled class.

t. You would have remembered what to buy if you \_\_\_\_\_ made a list.

u. We wish that they \_\_\_\_\_ helped us prepare our presentations.

v. If they saw the results, they \_\_\_\_\_ be delighted.

w. He \_\_\_\_\_ save a kitten if he saw it in danger.

x. I wish that the professor \_\_\_\_\_ extended the deadline.

Figure A1. Survey, production section

**Part II: Mark the category that best describes, in your opinion, the use of the underlined verb construction in each sentence.**

	archaic/ antiquated	formal/ academic	commonplace/ normal	colloquial/ informal only	jarring/ unacceptable
If Tom had <u>known</u> the truth, he would have told us.					
I wish I would have <u>gone</u> to that presentation.					
Emma wishes that she <u>had waited</u> for her sister.					
She wishes I <u>had saw</u> the movie with her last night.					
If they <u>had seen</u> your email, they would have responded.					
I wish that they would have <u>made</u> it easier to register online.					
James wishes I would have <u>brought</u> my textbook.					
They wish that Amelia would have <u>started</u> her project sooner.					
If something <u>would have happened</u> , I would have been upset.					
We wish we <u>had stayed</u> at a hotel instead.					
They wish that I <u>would have took</u> the class with them.					
If you <u>would have told</u> her, she would have stopped the car.					
I wish that David <u>had won</u> a scholarship this year.					
If Ana would have <u>said anything</u> , they would have fired her.					
We wish your supervisor <u>had asked</u> you to work more hours.					

### Part III: Demographics

1. Where did you learn your first (or only) language? (Please circle)

Western U.S.      Upper Midwestern/Great Lakes      Greater NYC Area      New England      Outside U.S.

U.S. Coastal Southern (Texas to Maryland)      U.S. Mountain Southern      U.S. Midland (NE, KS, IA, MO, IL, IN, OH, PA)

2. Is English your first language?      Yes      No      3. If yes to the previous question, do you speak another language?      Yes      No      NA

4. Are your parent(s) or guardian(s) native English speakers? Parent/Guardian 1: Yes      No      Parent/Guardian 2: Yes      No      NA

5. (For native English-speaking parent(s) or guardian(s)) Do either of your parents or guardians speak another language?      Yes      No      NA

6. (If applicable) How did your nonnative English-speaking parent(s) or guardian(s) learn English? \_\_\_\_\_

Figure A2. Survey, judgment and demographics sections

## APPENDIX B

### Full Production Results

Table B1

*Western U.S. Responses*

Question	Standard + Alt. Standard	Mixed Construction	Target Nonstandard	Alt. Nonstandard
Construction 1	372	84	81	18
<i>final protasis</i>	67.03%	15.14%	14.59%	3.24%
Construction 2	377	27	135	16
<i>initial protasis</i>	67.93%	4.86%	24.32%	2.89%
Construction 3	419	16	98	21
<i>PCWCC, Pro, <del>that</del></i>	75.64%	2.89%	17.68%	3.79%
Construction 4	334	32	155	34
<i>PCWCC, N, <del>that</del></i>	60.18%	5.77%	27.93%	6.12%
Construction 5	299	33	198	25
<i>PCWCC, Pro, that</i>	53.87%	5.95%	35.67%	4.50%
Construction 6	244	56	163	92
<i>PCWCC, N, that</i>	43.96%	10.09%	29.37%	16.58%



Table B2

*Western U.S. Native English Speaker Results, Native Parents*

Question	Standard + Alt. Standard	Mixed Construction	Target Nonstandard	Alt. Nonstandard
Construction 1	292	60	66	5
<i>final protasis</i>	69.03%	14.18%	15.60%	1.18%
Construction 2	293	16	106	8
<i>initial protasis</i>	69.27%	3.78%	25.06%	1.89%
Construction 3	322	13	77	10
<i>PCWCC, Pro, <del>that</del></i>	76.12%	3.07%	18.20%	2.36%
Construction 4	252	22	129	20
<i>PCWCC, N, <del>that</del></i>	59.57%	5.20%	30.50%	4.73%
Construction 5	227	26	162	8
<i>PCWCC, Pro, that</i>	53.66%	6.15%	38.30%	1.89%
Construction 6	198	41	125	59
<i>PCWCC, N, that</i>	46.81%	9.69%	29.55%	13.95%

Table B3

*Western U.S. Native English Speaker Results, One Nonnative Parent*

Question	Standard + Alt. Standard	Mixed Construction	Target Nonstandard	Alt. Nonstandard
Construction 1	19	3	6	2
<i>final protasis</i>	63.33%	10.00%	20.00%	6.67%
Construction 2	16	7	3	4
<i>initial protasis</i>	53.34%	23.33%	10.00%	13.33%
Construction 3	20	1	8	1
<i>PCWCC, Pro, <del>that</del></i>	66.67%	3.33%	26.67%	3.33%
Construction 4	16	4	8	2
<i>PCWCC, N, <del>that</del></i>	53.33%	13.33%	26.67%	6.67%
Construction 5	12	3	11	4
<i>PCWCC, Pro, that</i>	40.00%	10.00%	36.67%	13.33%
Construction 6	10	3	10	8
<i>PCWCC, N, that</i>	33.33%	10.00%	33.33%	26.67%

Table B4

*Western U.S. Native English Speaker Results, Nonnative Parents*

Question	Standard + Alt. Standard	Mixed Construction	Target Nonstandard	Alt. Nonstandard
Construction 1 <i>final protasis</i>	33 64.71%	9 17.65%	8 15.69%	1 1.96%
Construction 2 <i>initial protasis</i>	36 70.59%	3 5.88%	11 21.57%	1 1.96%
Construction 3 <i>PCWCC, Pro, <del>that</del></i>	42 82.35%	5 9.80%	0 0.00%	4 7.85%
Construction 4 <i>PCWCC, N, <del>that</del></i>	36 70.59%	4 7.84%	8 15.69%	3 5.88%
Construction 5 <i>PCWCC, Pro, that</i>	31 60.78%	4 7.84%	12 23.53%	4 7.84%
Construction 6 <i>PCWCC, N, that</i>	23 45.10%	8 15.69%	11 21.57%	9 17.65%

Table B5

*Western U.S. Nonnative English Speaker Results*

Question	Standard + Alt. Standard	Mixed Construction	Target Nonstandard	Alt. Nonstandard
Construction 1 <i>final protasis</i>	31 60.78%	8 15.69%	4 7.84%	8 15.69%
Construction 2 <i>initial protasis</i>	29 56.86%	5 9.80%	12 23.53%	5 9.80%
Construction 3 <i>PCWCC, Pro, <del>that</del></i>	35 68.63%	2 3.92%	8 15.69%	6 11.76%
Construction 4 <i>PCWCC, N, <del>that</del></i>	30 58.82%	2 3.92%	10 19.61%	9 17.65%
Construction 5 <i>PCWCC, Pro, that</i>	29 56.86%	0 0.00%	13 25.49%	9 17.65%
Construction 6 <i>PCWCC, N, that</i>	13 25.49%	4 7.85%	17 33.33%	17 33.33%

## APPENDIX C

### Full Judgment Results

Table C1

*Judgment Results by Question*

Question	archaic/ antiquated	formal/ academic	commonplace/ normal	colloquial/ informal only	jarring/ unacceptable
1	5	47	122	8	1
2	3	48	112	17	5
3	3	40	111	22	8
4*	1	18	42	30	91
5	2	37	120	16	7
6	6	40	119	16	1
7	5	42	92	22	19
8	7	52	92	22	9
9	9	44	95	26	11
10	3	25	125	23	7
11*	5	24	59	24	72
12	5	40	111	20	7
13	1	26	116	28	13
14	5	47	92	23	17
15	5	33	112	20	13

\*Questions 4 and 11 used nonstandard participles as distractors.

Table C2

*Judgment Results by Question, Native English Speakers with Native Parents*

Question	archaic/ antiquated	formal/ academic	commonplace/ normal	colloquial/ informal only	jarring/ unacceptable
1	5	30	97	6	1
2	3	35	87	11	5
3	2	28	92	13	5
4*	1	13	31	20	75
5	1	28	95	11	4
6	6	24	99	10	1
7	4	29	72	16	16
8	6	37	74	15	8
9	8	31	75	17	10
10	2	12	100	21	5
11*	4	15	46	13	62
12	5	30	85	13	6
13	1	16	94	17	12
14	5	31	71	19	15
15	4	22	93	10	10

\*Questions 4 and 11 used nonstandard participles as distractors.

Table C3

*Judgment Results by Question, Native English Speakers with One Nonnative Parent*

Question	archaic/ antiquated	formal/ academic	commonplace/ normal	colloquial/ informal only	jarring/ unacceptable
1	0	5	5	0	0
2	0	2	5	3	0
3	0	4	3	3	0
4*	0	0	4	2	4
5	1	3	5	1	0
6	0	3	6	1	0
7	0	2	5	3	0
8	0	3	5	2	0
9	0	5	3	2	0
10	0	4	5	1	0
11*	0	3	3	4	0
12	0	4	5	1	0
13	0	3	6	1	0
14	0	6	4	0	0
15	0	2	4	4	0

\*Questions 4 and 11 used nonstandard participles as distractors.

Table C4

*Judgment Results by Question, Native English Speakers with Nonnative Parents*

Question	archaic/ antiquated	formal/ academic	commonplace/ normal	colloquial/ informal only	jarring/ unacceptable
1	0	5	12	0	0
2	0	5	11	1	0
3	0	2	11	5	1
4*	0	3	5	4	5
5	0	2	10	3	1
6	0	8	7	1	0
7	1	6	9	0	1
8	1	7	7	1	0
9	1	4	8	3	1
10	0	5	11	0	1
11*	1	3	5	2	6
12	0	3	12	2	0
13	0	5	9	2	1
14	0	5	10	0	2
15	0	5	8	3	1

\*Questions 4 and 11 used nonstandard participles as distractors.

Table C5

*Judgment Results by Question, Nonnative English Speakers*

Question	archaic/ antiquated	formal/ academic	commonplace/ normal	colloquial/ informal only	jarring/ unacceptable
1	0	7	8	2	0
2	0	6	9	2	0
3	1	6	7	1	2
4*	0	2	2	4	7
5	0	4	10	1	2
6	0	5	7	4	0
7	0	5	6	3	2
8	0	5	6	4	1
9	0	4	9	4	0
10	1	4	9	1	1
11*	0	3	5	5	4
12	0	3	9	4	1
13	0	2	7	8	0
14	0	5	7	4	0
15	1	4	7	3	2

\*Questions 4 and 11 used nonstandard participles as distractors.